Rider xplat adventures

xBuild

Не собирается проект:

Build FAILED.

Warnings:

/Users/mfilippov/Demo/ConsoleApplication/ConsoleApplication/ConsoleApplication.csproj: warning: Could not find project file /Users/mfilippov/Demo/ConsoleApplication/ConsoleApplication/ManagedProject.Targets, to import. Ignoring.

Errors:

/Users/mfilippov/Demo/ConsoleApplication/ConsoleApplication.sln (default targets) -> (Build target) ->

/Users/mfilippov/Demo/ConsoleApplication/ConsoleApplication/ConsoleApplication.csproj: error : /Users/mfilippov/Demo/ConsoleApplication/ConsoleApplication/ConsoleApplication/ConsoleApplication/ConsoleApplication/ConsoleApplication/ConsoleApplication.csproj could not import "ManagedProject.\$([System.Text.RegularExpressions.Regex]::Match(\$(SolutionFileName), '^[\w\.]+\.').Value)Targets"

1 Warning(s)
1 Error(s)

Time Elapsed 00:00:00.2181650

```
^[\w\.]+\.
```

```
-<Import Project="$(MSBuildToolsPath)\Microsoft.CSharp.targets" />
-<Import Project="ManagedProject.$([System.Text.RegularExpressions.Regex]::Match($(SolutionFileName), '^[\w\.]+\.').Value)Targets" />
</Project>
```

xBuild

xBuild при парсинге выражений всегда "чинит" слеши

```
public void Parse (string expression, ParseOptions options)
{
    bool split = (options & ParseOptions.Split) == ParseOptions.Split;
    bool allowItems = (options & ParseOptions.AllowItems) == ParseOptions.AllowItems;
    bool allowMd = (options & ParseOptions.AllowMetadata) == ParseOptions.AllowMetadata;

expression = expression.Replace ('\\', Path.DirectorySeparatorChar);

string [] parts;
    if (split)
        parts = expression.Split (new char [] {';'}, StringSplitOptions.RemoveEmptyEntries);
    else
        parts = new string [] { expression };

// TODO: Too complicated, each part parses only its known part
    // we should simply do it in one go and avoid all this parts code madness
```

xBuild

Evaluation != Build

```
string projectFile = parameters.ProjectFile;
if (!File.Exists (projectFile)) {
    ErrorUtilities.ReportError (0, String.Format ("Project file '{0}' not found.", projectFile));
    return;
}

result = engine.BuildProjectFile (projectFile, parameters.Targets, null, null, BuildSettings.None, parameters.ToolsVersion);
}
```

Неожиданно начало падать Mono в тестах, после небольшого рефакторинга, stacktrace были почти всегда разные.

refs/heads/wave07	#163.8202	① Tests passed: 143, ignored: 1; critical test framework failure, cause: com.jetbrains.testSources.fra ▽	View ▽	Changes (24) ▽
refs/heads/wave07	#163.8194	▼ Tests passed: 474, ignored: 4, muted: 6 ▼	View ▽	Changes (4) ▽
refs/heads/wave07	#163.8174	☑ Tests passed: 477, ignored: 4, muted: 3 ☑	View ▽	Slava Tutushkin (1) ▽

```
916fc8c4153345bb6de66956aaef00fbcda7edae (Read-only)
      namespace РеШарпер
 1
      {
          // Настоящие названия классов изменены из-за NDA
 3
          public interface IМойКлевыйИнтерфейс<T>
              // бла-бла-бла
          }
 8
          public class МойКлевыйТип<Т> : ІМойКлевыйИнтерфейс<Т>
 9
10
              // бла-бла-бла
11
12
13
14
          public class ОсновнаяЛогика
15
              public void Главный()
16
17
                   var объект1 = new МойКлевыйТип<int>();
18
                  var объект2 = new МойКлевыйТип<string>();
19
                  var объект3 = new МойКлевыйТип<double>():
20
21
                  // ...
22
          }
23
      }
24
```

А не сэкономить ли нам немного памяти 65535 интерфейсов хватит всем!

Mon Jan 17 16:14:46 CET 2005 Paolo Molaro < lupus@ximian.com>

* class.c, object.c, class-internals.h, marshal.c: rearrange some fields and tweak some types to lower memory usage.

```
interface_count;
                     quint
                                                                                    1 mono/metadata/class.c
                                                      /* unique inderface id (for
                     guint
                                 interface_id;
229
                     quint
                                 max_interface_id;
                                                                                        忠
                                                                                                 @@ -919,6 +919,7 @@ mono_get_unique_iid (MonoClass *class)
230
                      gint
                                 *interface_offsets;
                                                                                     919
                                                                                           919
231
                    MonoClass **interfaces:
                                                                                            920
                                                                                                          mono loader unlock ();
232
                                                                                           921 +
                                                                                     921
233
       227
                     /* for fast subtype checks */
                                                                                            922 +
                                                                                                          q assert (iid <= 65535);
234
                     guint
                                 idepth;
                                                                                     922
                                                                                                          return iid - 1;
                                                                                            923
       228
                    MonoClass **supertypes;
                                                                                     923
                                                                                            924
       229
                    quint16
                                 idepth;
                                                                                            925
                                                                                     924
       230
                                 interface count;
                     quint16
       232
                                                      /* unique inderface id (for interfaces) */
                     guint16
                                 interface_id;
       233
                                 max_interface_id;
                     quint16
       234
                                 *interface_offsets;
                      gint
       235 +
                     MonoClass **interfaces;
```

После обновления пользовательской Мопо перестало уста

```
static IOAsyncCallback BeginAcceptCallback = new IOAsyncCallback (ares => {
    SocketAsyncResult sockares = (SocketAsyncResult) ares;
    Socket socket = null;

    try {
        socket = sockares.socket.Accept ();
    } catch (Exception e) {
        sockares.Complete (e);
        return;
    }

    sockares.Complete (socket);
});
```

Accept делается не на том Socket

```
992
                       static IOAsyncCallback BeginAcceptCallback = new IOAsyncCallback (ares => {
 993
                               SocketAsyncResult sockares = (SocketAsyncResult) ares;
 994
                               Socket acc_socket = null;
 995 +
                               try {
 996
                                       if (sockares.AcceptSocket == null) {
 997
                                                acc_socket = sockares.socket.Accept ();
 998
                                       } else {
 999
                                                acc_socket = sockares.AcceptSocket;
1000
                                                sockares.socket.Accept (acc_socket);
1001
1002
                               } catch (Exception e) {
1003
1004
                                       sockares.Complete (e);
1005
                                       return;
1006
1007
                               sockares.Complete (acc_socket);
                       });
1008
```

Иногда mono падает с вот таким stacktrace:

```
Stacktrace:
  at <unknown> <0xffffffff>
  at object.Equals (object,object) <0x0003f>
  at System.Configuration.PropertyInformation.SetStringValue (string) <0x0005f>
  at System.Configuration.ConfigurationElement.DeserializeElement (System.Xml.XmlReader,bool) <0x0040b>
  at System.Configuration.ConfigurationElement.DeserializeElement (System.Xml.XmlReader,bool) <0x00890>
  at System.Configuration.ConfigurationSection.DoDeserializeSection (System.Xml.XmlReader) <0x00213>
  at System.Configuration.ConfigurationSection.DeserializeSection (System.Xml.XmlReader) <0x0001f>
  at System.Configuration.Configuration.GetSectionInstance (System.Configuration.SectionInfo,bool) <0x0038c>
  at System.Configuration.Configuration.GetSectionInstance (System.Configuration.SectionInfo,bool) <0x001fb>
  at System.Configuration.ConfigurationSectionCollection.get Item (string) <0x000cf>
  at System.Configuration.Configuration.GetSection (string) <0x00127>
  at System.Configuration.ClientConfigurationSystem.System.Configuration.Internal.IInternalConfigSystem.GetSection (string) <0x00027>
  at System.Configuration.ConfigurationManager.GetSection (string) <0x00024>
  at System.Net.Sockets.Socket..cctor () <0x004cf>
  at (wrapper runtime-invoke) object.runtime invoke void (object.intptr.intptr.intptr) <0x0004c>
  at <unknown> <0xfffffffff>
  at (wrapper managed-to-native) object. icall wrapper mono generic class init (intptr) <0x00012>
  at JetBrains.Platform.RdFramework.Impl.SocketWire/Client/<>c DisplayClass12.<.ctor>b c () <0x00143>
```

```
static Socket ()
103
104
                                      try {
137
                                              NetConfig config = System.Configuration.ConfigurationSettings.GetConfig("system.net/set
138
                                              if (config != null)
139
                                                       ipv6_supported = config.ipv6Enabled ? -1: 0;
140
                                      } catch {
141
                                              ipv6\_supported = -1;
142
                                      }
143
```

B master mono удалили статический конструктор

Иногда mono падает с вот таким stacktrace:

```
Stacktrace:

at <unknown> <0xffffffff>
at (wrapper managed-to-native) object.__icall_wrapper_mono_gc_alloc_vector (intptr,intptr) <0x00065>
at (wrapper alloc) object.AllocVector (intptr,intptr) <0x00169>
at System.Collections.Generic.List' 1<T_REF>.set_Capacity (int) <0x00061>
at System.Collections.Generic.List'1<T_REF>.EnsureCapacity (int) <0x000082>
at System.Collections.Generic.List'1<T_REF>.EnsureCapacity (int) <0x000082>
at System.Collections.Generic.List'1<T_REF>.Add (T_REF) <0x000038>
at JetBrains.ReSharper.Psi.Impl.Reflection2.ExternalAnnotations.AnnotationsIndexBuilder/<>c_DisplayClass22/<>c_DisplayClass25.<BuildIndexForFile>b_9 (string) <0x00224>
at JetBrains.ReSharper.Psi.Impl.Reflection2.ExternalAnnotations.XmlPsiScanner/AttributeScanner.ParseTagAttributeValue (System.Xml.XmlReader) <0x0003a>
at JetBrains.ReSharper.Psi.Impl.Reflection2.ExternalAnnotations.XmlPsiScanner/TagScanner.ParseTag (System.Xml.XmlReader) <0x00012c>
at JetBrains.ReSharper.Psi.Impl.Reflection2.ExternalAnnotations.XmlPsiScanner/TagScanner.ParseTag (System.Xml.XmlReader) <0x00204>
at JetBrains.ReSharper.Psi.Impl.Reflection2.ExternalAnnotations.XmlPsiScanner/TagScanner.ParseTag (System.Xml.XmlReader) <0x000204>
at JetBrains.ReSharper.Psi.Impl.Reflection2.ExternalAnnotations.XmlPsiScanner/TagScanner.ParseTag (System.Xml.XmlReader) <0x000204>
at JetBrains.ReSharper.Psi.Impl.Reflection2.ExternalAnnotations.XmlPsiScanner/TagScanner.ParseTag (System.Xml.XmlReader) <0x00019>
```

В mono добавили поддержку SIMD и на macOS она работа

[wip] [runtime] Fix scanning of SIMD registers on Mac. #3764

№ Merged

```
kumpera merged 1 commit into mono:master from evincarofautumn:fix-xmm-scanning-mac 16 days ago
   Changes from all commits + 9 files > +288 -70 ****
                                    marea_t gregs [MMD64_MRE6];
                                                                                                                                                                                                                                                                                                                          marco_t gregs [AMD64_MRE6];
                                                                                                                                                                                                                                                                                           185 WEFER _APPLE_
                                                                                                                                                                                                                                                                                                                       MassCantestSimeReg frage [AMD64_XMM_MMZG];
                                     double fregs [AMD64_XPM_NRES];
     100 #define MONO_CONTEXT_SET_IP(cis_ip) do { (cis)-agrego [APO64_RIF] = impreg_i)(ip); } while (0);
                                                                                                                                                                                                                                                                                             150 #Setime MOND_CONTEXT_SET_IF(cts.ip) do { (cts)-sgrage [AMOS4_NIF] = (sgrag_t)(ig); } while (0);
                                                    : "rds", "minury").
                                                                                                                                                                                                                                                                                                                                            : "rebt", "memory")
   / Estilitements TSS TXSTMOS COMM and Table | 460
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                                                    "Wave save, excepted to"
                                                    "move march, Budgiadita"
                                                                                                                                                                                                                                                                                                                                                             "move saxe, helparlinelter
                                                    "move wards, Externellus"
                                                                                                                                                                                                                                                                                                                                                            "move whires, we incell (40) he"
                                                    "move warter, Build (48) ha"
                                                     "Howg harsp. 8x28/h8/\n"
                                                      "move Write, Existing"
                                                      "movq 99/18, 8658(98)\n*
                                                     "move worth, exactweller"
                                                     "move words, massission"
                                                     "move werst, mession)/m"
                                                     "move sersa, extelesion"
                                                                                                                                                                                                                                                                                                                                                             "move whris, belrislikelye"
                                                   1 "H" [60cts)] \
                                                                                                                                                                                                                                                                                                                                                            1 "a" 16(ctx11, \
                                                                                                                                                                                                                                                                                                                                                                          [rae] HOME_CONTEXT_OFFSET (grags, AMD64_MAX, rgrag_5); \
                                                                                                                                                                                                                                                                                                                                                                              [rex] HOMO_CONTEST_OFFICE (gregs, AMGG4_RGX, Hgrag_1), A
                                                                                                                                                                                                                                                                                                                                                                              Indx1 MOWO_CONTEXT_OFFSET Igregs, AMDG4_ROX, egreg_t), \
```

Моно падает при чтении системного NuGet.config

0x000000010eab167f tmp_dir + 5471

0x00007fff86e909b3 abort + 129

mono-sgen

libsystem c.dylib

```
at <unknown> <0xffffffff5>
at (wrapper managed-to-native) System. Threading. WaitHandle. WaitOne_internal (System. Threading. WaitHandle, intptr, int, bool) <0xffffffff>
at System. Threading. WaitHandle. WaitOne (System. TimeSpan, bool) <0x0009b>
at System.Threading.WaitHandle.WaitOne (System.TimeSpan) <0x0001d>
at NuGet.Configuration.Settings.ExecuteSynchronizedCore (System.Action) <0x00143>
at NuGet.Configuration.Settings.ExecuteSynchronized (System.Action) <0x00019>
at NuGet.Configuration.Settings..ctor (string.string.bool) <0x0032b>
at NuGet.Configuration.Settings.ReadSettings (string, string, bool) <0x0008a>
at NuGet.Configuration.Settings.LoadUserSpecificSettings (System.Collections.Generic.List`1<NuGet.Configuration.Settings>,string,string
<0x00418>
at NuGet.Configuration.Settings.LoadDefaultSettings (string, String, NuGet.Configuration.IMachineWideSettings, bool, bool) <0x0031e>
at NuGet.Configuration.Settings.LoadDefaultSettings (string.String.NuGet.Configuration.IMachineWideSettings) <0x00026>
Native stacktrace:
                                         0x000000010e7c976a mono_handle_native_sigsegv + 282
    mono-sgen
    libsystem_platform.dylib
                                         0x00007fff8e929f1a _sigtramp + 26
```

NuGet.config в NuGet.Client читается с помощью NamedMu



AndreyAkinshin commented on May 30 Hi, I have the following exception:

- at <unknown> <0xffffffff>
- at (wrapper managed-to-native) System. Threading. WaitHandle. WaitOne_internal (System. Thread
- at System.Threading.WaitHandle.WaitOne (System.TimeSpan.bool) <0x0009b>



migueldeicaza commented on Jun 23

Named mutexes in Mono are process-local, they are not global like they are on Windows, so on the Mono case, it should use the same setup.

In the past, many years ago, mono supported global mutexes across a processes in the user namespace, but that support was very brittle and we removed the code some 4-5 years ago.

CoreCLR

Ha Linux не работает discover юнит тестов из .NET Core. Сделали маленькое repro, которое срабатывает, только ко

```
AndreyAkinshin commented on Oct 18

Consider the following program:

public static void Main(string[] args)
{
    try
    {
        Process.GetProcesses();
    }
    catch (Exception e)
    {
```

Console.WriteLine(e);

```
at System.IO.StringParser.ParseNextChar()
at Interop.procfs.TryParseStatFile(String statFilePath, ParsedStat& result, ReusableTextReader reusableReader)
at System.Diagnostics.ProcessManager.CreateProcessInfo(ParsedStat procFsStat, ReusableTextReader reusableReader)
at System.Diagnostics.ProcessManager.CreateProcessInfo(Int32 pid, ReusableTextReader reusableReader)
at System.Diagnostics.ProcessManager.GetProcessInfos(String machineName)
at System.Diagnostics.Process.GetProcesses(String machineName)
at System.Diagnostics.Process.GetProcesses()
at DotNetCoreConsoleApplication.Program.Main(String[] args) in
/home/akinshin/RiderProjects/DotNetCoreConsoleApplication/DotNetCoreConsoleApplication/Program.cs:line 12
```

CoreCLR

В имени Thread в Rider есть пробелы



stephentoub commented 29 days ago

.NET Foundation member

+ 😐

Thanks, @AndreyAkinshin. I installed Rider and found the problem. The JetBrains.ReSharper.Host.exe process has a thread in it with a name that includes spaces: "JetPool (S) Reg". When we're parsing the processes' task list looking for its threads, we parse the stat file for each task, and in doing so we misinterpret the space in the name as a space separator for the other items in the line. The fix in System.Diagnostics.Process is likely to track the parens and ensure we treat the whole parenthesized unit as the name. In the meantime, as a workaround, if you have control over the thread/task's name (something somewhere is probably calling a function like pthread_setname_np, or using prctl with PR_SET_NAME), you could try using a name that doesn't include spaces.

Fix parsing of procfs stat files when comm name contains spaces #12791

Other issues

- NetMq AsyncSocket and SetSocketOption()
- 2. MockWPF
- 3. NotImplementedException
- 4. \vs/
- 5. \r\n vs \n
- 6. AppDomain LoadAssembly
- 7. ...

Итог

- 1. Используем Mono из master
- 2. Используем бинарники xplat MSBuild
- 3. Пытаемся разрабатывать проект не только на Win
- 4. Репортим баги на github и иногда сами их чиним :)