



some quick slides on

OPEN SOURCE GEO UNDER .NET

mpg
LizardTech / CUGOS
16 June 10

“It’s just like Java”

.NET is Microsoft’s new framework

now at version 4.0, it is no longer “new”

- Extensive runtime libraries
 - I/O, databases, UIs, threading, Web, ...
- Virtual machine, with garbage collection
- Great language and IDE support
 - C# *(the cat’s meow, the bees knees, and mpg’s fave)*
 - Visual Basic (VB.NET)
 - Managed C++
 - F#, IronPython, IronRuby, ...
- Good interop support
- *Oh, yeah, and then there’s that Mono thing...*

mono evil

About 2,020,000 results (0.26 seconds)

[Meet the GIMP » Blog Archive » Is Mono evil?](#) ☆

Nov 18, 2008 ... I for one don't think that **mono** is remotely **evil**; the FSF even support a similar project (GNU.net). While people sight Microsoft's ...

meetthegimp.org/is-mono-evil/ - Cached

[Is mono evil? - Page 5 - Ubuntu Forums](#) ☆

Feb 8, 2009 ... Is **mono evil**? Programming Talk. ... "**Mono**" means ape in English, and yes the "**mono**" is **evil** and comes out of my closet and points at me! ...

ubuntuforums.org/showthread.php?p=6698506 - Cached

[What's So Evil About Mono? | Linux Developer Network](#) ☆

Oct 6, 2008 ... What's so **evil** about **Mono**? Perhaps not so much... "Insisting on some kind of purity before putting out the welcome mat is counter-productive ...

ldn.linuxfoundation.org/article/whats-so-evil-about-mono - Cached - Similar

[What's So Evil About Mono? - Linux Today Blog](#) ☆

Oct 6, 2008 ... The **Mono** project has been branded as **evil**, a sellout, a product of a Microsoft-loving lackey from its inception. I think this is a misguided ...

blog.linuxtoday.com/blog/2008/10/whats-so-evil-a.html - Cached

[Is Mono evil? | tante's blog](#) ☆

Aug 11, 2008 ... A few years ago Miguel de Icaza, who had started the GNOME project before, announced his intention to create a Linux version of Microsofts ...

the-gay-bar.com/2008/08/11/is-mono-evil/ - Cached

[Is mono evil? - Ubuntu Forums](#) ☆

10 posts - 8 authors - Last post: Feb 5, 2009

Mono isn't **evil**. C# is an open standard, so anyone is able to implement it. The issue is whether MS is **evil** enough to suit the **Mono** project ...

swiss.ubuntuforums.org/showthread.php?t=1060910 - Cached

[Scott Grizzard – Personal Website » Why Mono is Good, even though ...](#) ☆

Jun 16, 2009 ... **Mono** is **evil**, and to paraphrase Douglas Adams, Microsoft has shown it is not above such behavior "in the same way the sea is not above the ...

www.scottgrizzard.com/.../why-mono-is-good-even-though-its-evil/ - Cached - Similar

Mono is **EVIL** because...

- ...anything associated with anything from Redmond is evil, by definition, *or*
- ...Miguel de Icaza is a shill for MSFT, *or*
- ...Mono users are giving aid and comfort to the enemy, *or*
- ...Microsoft is just waiting to pounce and play the patent card, *or...*



Yeah, yeah, whatever.

C#?

C# is just like C++, except for where it's not:

- pointers
- + garbage collection (GC)
- Boost
- + extensive runtime libraries (CLR)
- multiple inheritance
- + lambdas
- + just-in-time compilation (JIT)
- performance
- + performance
- ...

Comparisons to Java and Objective-C are also possible.

But not by me.

First, non-geo open source

- Sites
 - [CodePlex](#)
 - like SourceForge, etc; controlled by MSFT
- Showcase apps
 - [DotNetNuke](#)
 - CMS (content management system)
- Common libraries
 - SQLite
 - Struts, Spring
 - Log4Net
- and on and on



Native Geo support?

- Bing Maps
- Spatial extensions to SQL Server 2008
- *blah blah blah*

Yeah, but *K00L* geo support?

- Yes!
 - Not yet as rich or mature as the C++ or Java tribes
- A few scattered non-OSGeo efforts started
 - seems nothing took root and grew
- But, recent OSGeo interest
 - dotnet@lists.osgeo.org *(high hopes!)*



(Now the good stuff.)



MapWindow

- [Old Site](#), [New Site](#)
- [Video](#)

SharpMap

```
var map = new SharpMap.Map(new Size(400,300));  
map.Size = new System.Drawing.Size(300,200); //Set output size  
  
map.BackgroundColor = Color.White;  
map.Center = new SharpMap.Geometry.Point(725000, 6180000);  
  
var layer = new SharpMap.Layers.VectorLayer("MyLayer");  
String conn = "Server=...;Port=...;UserId=...;Password=...;Database=...";  
layer.DataSource = new SharpMap.Data.Providers.PostGIS(conn, "MyTable", ...);  
map.Layers.Add(layer);  
  
map.ZoomToExtents();  
System.Drawing.Image imgMap = map.GetMap();
```

Nice!

Common Libraries

- **Net Topology Suite**
 - direct port of JTS
 - spatial predicates and functions for 2D shapes
- **Proj4Net**
 - direct port of Proj4J
 - coordinate transform service
- **GDAL, libLAS, ...**
 - .NET bindings



Let's try something...

Google search for:

[wpf control openstreetmap source](#)



Thank you.

Questions?