

**How CROSS PLATFORM is your .NET?** 

# Jb Evain jb @ db4o.com

## db4objects Inc.

• http://www.db4o.com

#### Google's Summer of Code

• 2005 on Cecil, 2006 on the linker

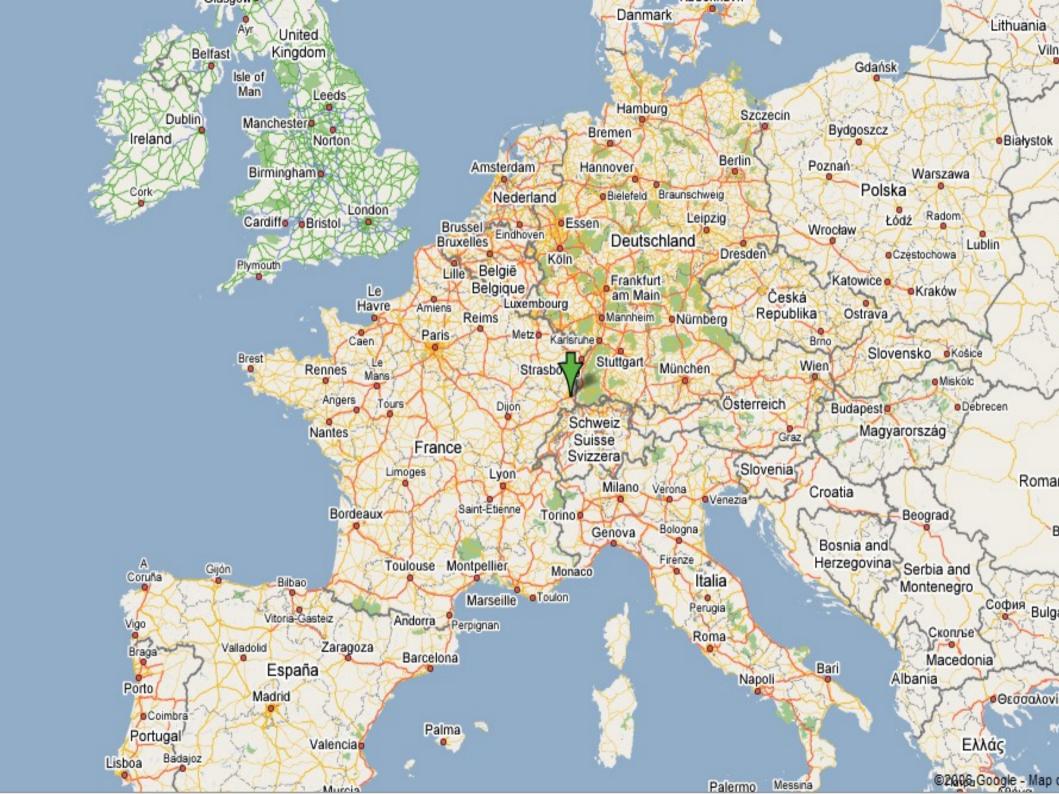
## Cecil and projects around

#### what is Cecil?

## it's not the name of my girl friend

## it's not the name of my boy friend either





### let's go back to Cecil

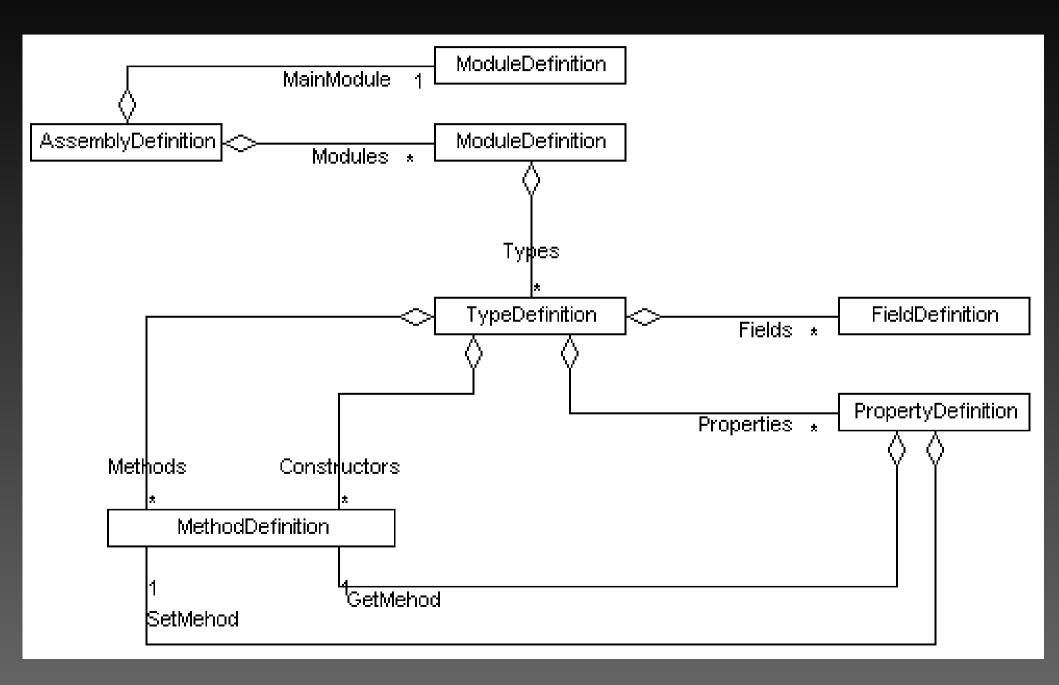
## Cecil just ends with CIL

# Common Intermediate Language

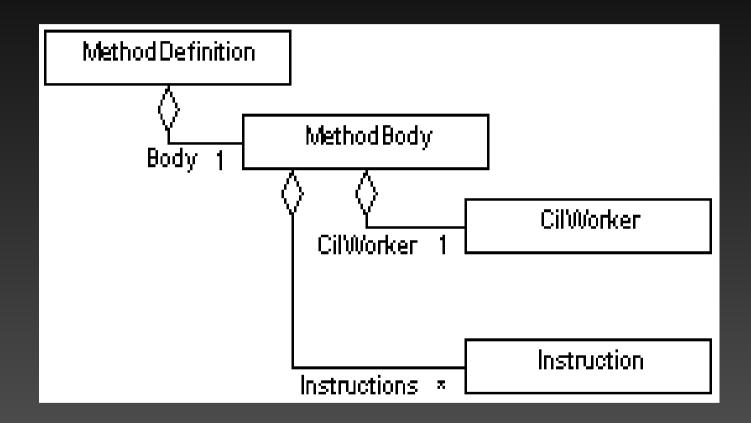
« Cecil is a library to
 generate and inspect
programs and libraries in
 the ECMA CIL format. »

http://mono-project.com/Cecil

## Assembly



#### Method



#### benefits

- Assemblies are not « loaded »
- Doesn't load the referenced assemblies
- Works with assemblies emitted for another framework
- It works on Microsoft's Compact Framework
- Fills the lacks of System.Reflection.Emit

#### when not to use Cecil?

# as soon as you think « dynamic »

### who uses Cecil?

#### MonoDevelop

• http://www.monodevelop.com

#### mdb

• http://mono-project.com/Debugger

#### Gendarme

• http://mono-project.com/Gendarme

#### db4o

• http://www.db4o.com

#### Mainsoft's GrassHopper

#### AspectDNG

• http://aspectdng.tigris.org

#### Evaluant's EUSS

• http://euss.evaluant.com

## NDepend

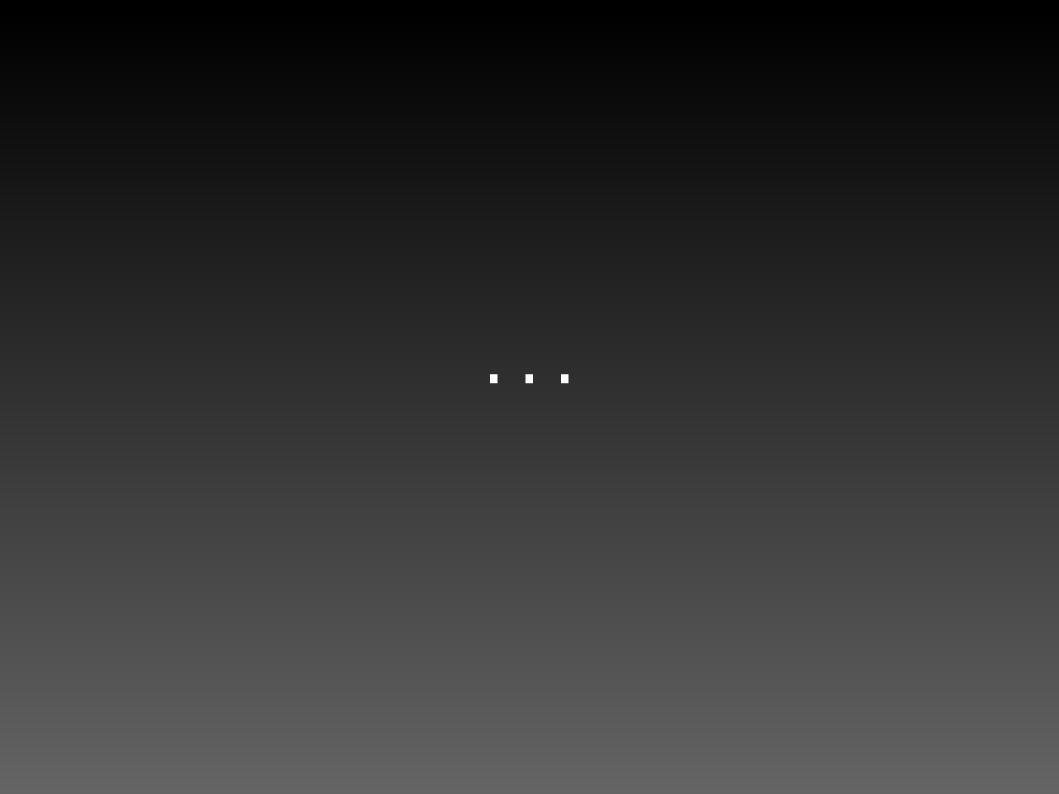
• http://www.ndepend.com

## SharpDevelop

• http://www.sharpdevelop.com

#### the assembly linker

http://mono-project.com/Linker



#### demo

next step: debug symbols

## the assembly linker

### i'm still looking for a cool name

«The linker is a tool one can use to only ship the minimal possible set of functions that a set of programs might require to run as opposed to the full libraries»

http://mono-project.com/Linker

« I don't know half of you
half as well as I should
like; and I like less that
half of you half as well
as you deserve. »

#### how does it work?

#### mark & sweep

## the linker + mkbundle : secret weapon

#### demo

# a cool idea: improve the linker to produce a Compact Mono

#### my secret next project

#### Milo



### generic compiler backend for the CLI

# primitive types for: Ast, Compilation, Decompilation

## It's still a vaporware at this time

### others cool projects to do with Cecil

#### ilasm/ildasm

peverify

