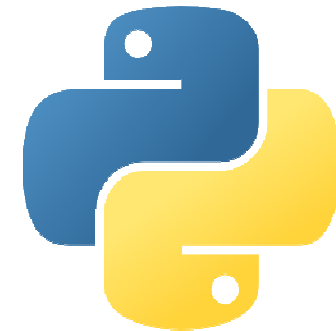




Microsoft: IronRuby, IronPython and the Dynamic Language Runtime



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LOLCODE

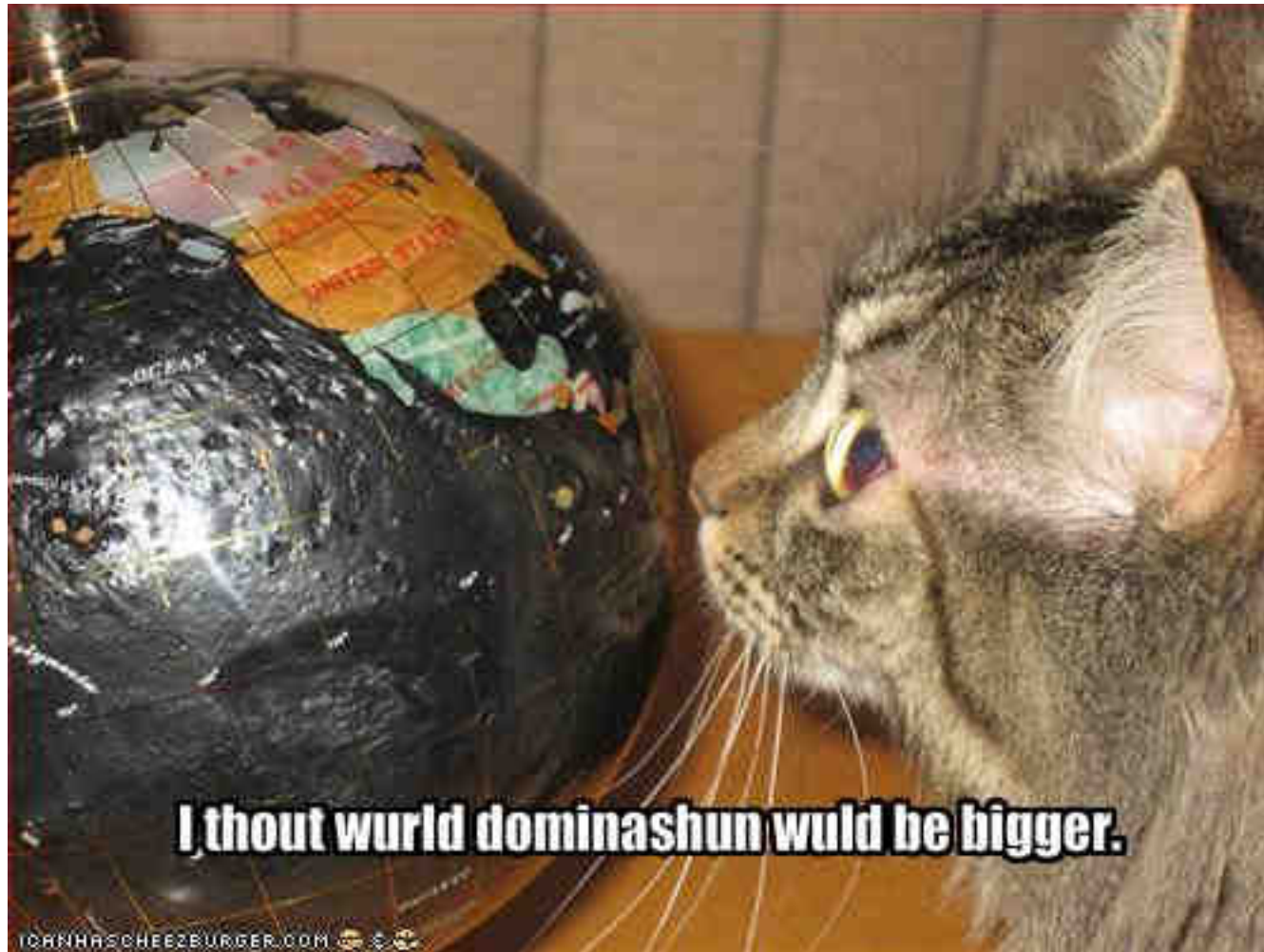
Professional
Developer
Network

HAI

CAN HAS STUDIO?

VISIBLE "HAI WORLD!"

KTHXBYE



I thout world dominashun wuld be bigger.

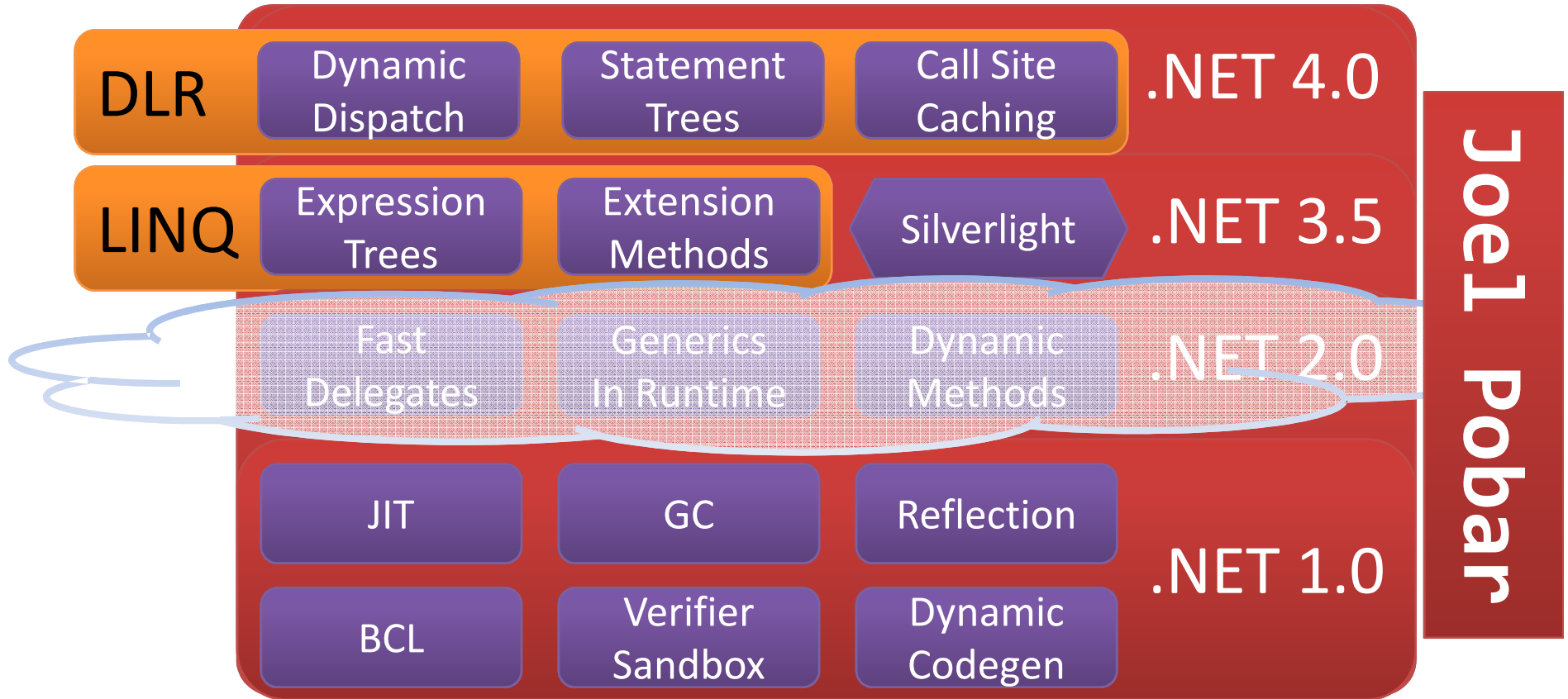
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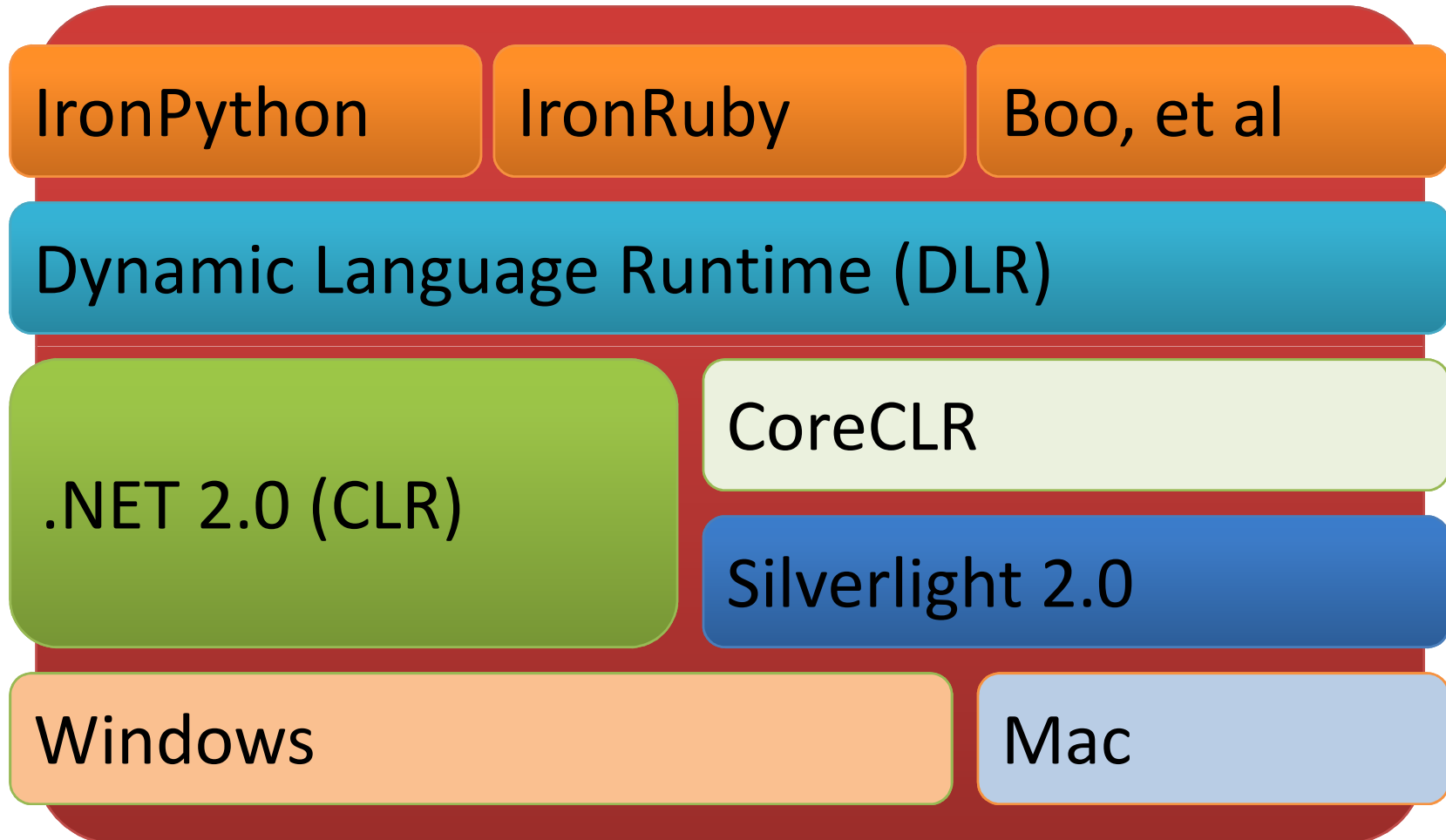
Dynamic languages

- Love 'em or Hate 'em People are Using 'em
- History
 - Visual Basic; implemented as Classic .asp
- Language / Framework tie in
 - PHP (Wordpress)
 - Ruby (Rails, Merb)
 - **Javascript (DOM/Browser to jQuery *et al*)**

The {C|D}LR



The Stack





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Submitted by nelson on Mon, 2007-10-15 19:23. ::

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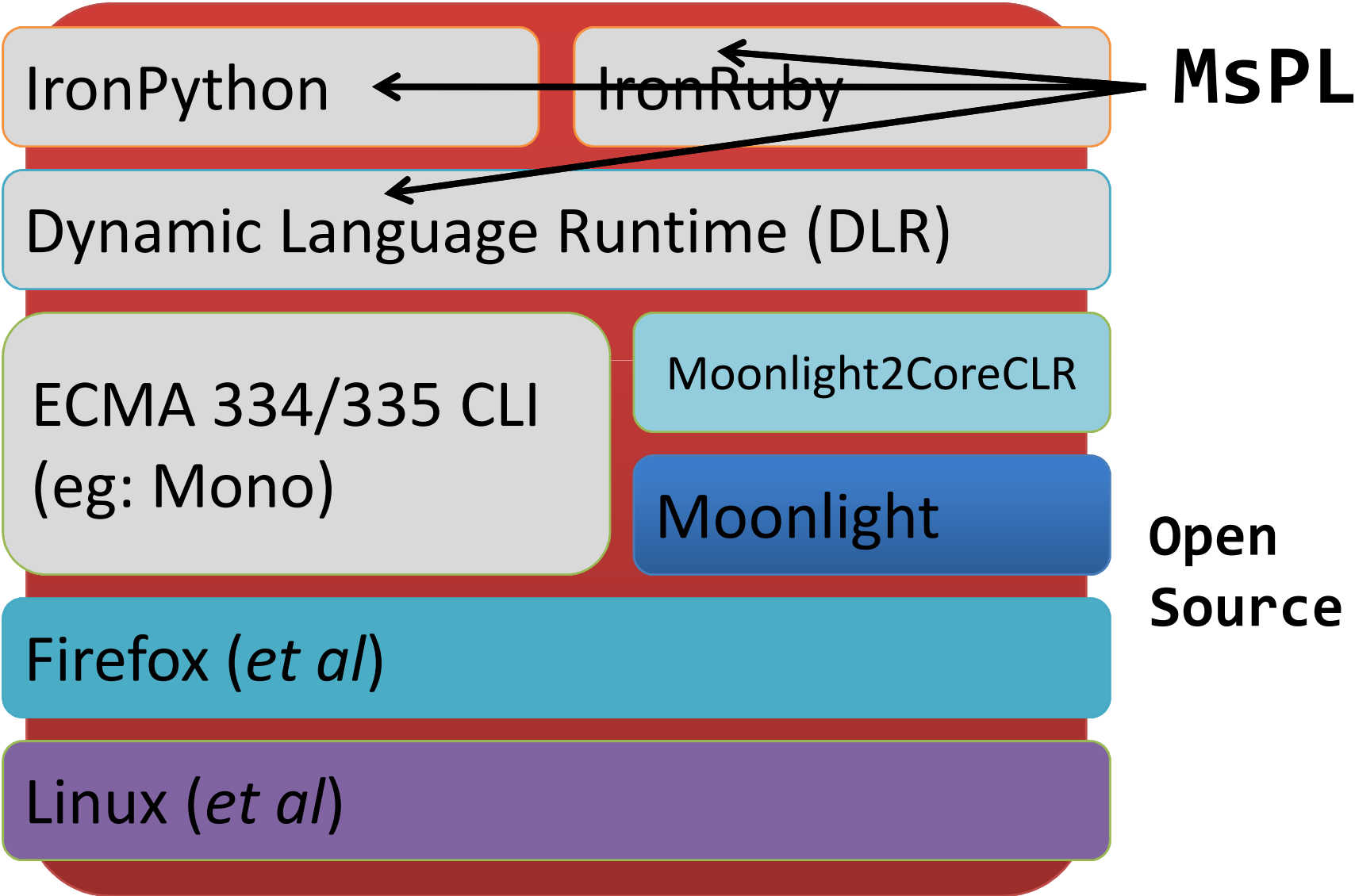
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Cats and Dogs Living Together



Open Source = Consequences



Why Iron*?





Inspiration

- How could Microsoft have screwed up so badly that the CLR is far worse than the JVM for dynamic languages?
 - Jython shows that dynamic languages can run well on the JVM
- **Jim Hugunin** decided to write a short pithy paper called, “Why .NET is a terrible platform for dynamic languages”
 - 2003
- **2007**: John Lam (.NET → MRI)

Dynamic Language Runtime

- Abstracted framework for implementing a dynamic language on .NET/CLR
- Back-end compilers
- Dynamic operations on Objects
- Common Hosting of Languages
- Building your own language with DLR + ANTLR3
 - <http://www.bitwisemag.com/2/DLR-Build-Your-Own-Language>
 - Dermot Hogan. My tiny mind has assploded
- Check out: **Irony**: Script.NET, Lua
 - <http://codeplex.com/irony>

It's on Codeplex

- IronPython, IronRuby
 - <http://codeplex.com/ironpython>
 - <http://ironruby.net/>
- Codeplex == TFS “in the cloud” ☺
- Core V1 components – Trees, Sites, Binders
 - Will ship in .NET Framework 4.0
 - *Basis for C# 4.0's dynamic*
- Future pieces are also available today
 - Microsoft.Scripting.dll
- <http://langnetsymposium.com/2009/talks.aspx>
- ***(IronRuby is in github)***

Language Specifications

- Ruby
 - Notorious for no formal specification
 - RubySpec: now used by MRI, JRuby, IronRuby...
- Python
 - New movement in recent 6 weeks

Languages on the DLR

- Groovy (yes, Java scripting!)
- Nua (Lua)
- IronScheme
- Phalanger (PHP on CLR/DLR)
- Basic Basic and Basic Javascript (egs)



Software Manager

This tool lets you install, remove, and update applications. [more](#)



Available



Upgrades



Installed

Groups

Packages listing:

python

- All
- Admin Tools
- Communication
- Education
- Games
- GNOME Desktop
- Graphics
- KDE Desktop
- Localization
- Multimedia
- Network
- Office
- Other Desktops
- Programming**
- Publishing
- Security

- cmipi-bindings-pywbem
Adapter to write and run CMPI-type CIM providers in Python
- dbus-1-python-devel
Python bindings for D-Bus
- epydoc
Tool for Generating Python API Documentation
- eric
Python IDE
- ht2html
The www.python.org Web Site Generator
- IPCE**
Implementation of the Python programming language running on .NET
- libgpod-python
A python module to access iPod content with libgpod
- libvirt-python
A C toolkit to interact with the virtualization capabilities of Linux
- libxslt-python
Python Bindings for libxslt
- openwsman-python
Python bindings for openwsman client API
- pkipplib
IPP and CUPS support for Python

IPCE

IronPython is the code name of the new implementation of the Python programming language running on .NET. It supports an interactive console with fully dynamic compilation. It is well integrated with the rest of the .NET Framework and makes all .NET libraries easily available to Python programmers, while maintaining full compatibility with the Python language.

Available:

r7-1.82 (r
openSUSE-



Help

Tools



Cancel

IronPython Roadmap

IPy 1.0

- Shipped Sept. 2006
- v2.4 language compatibility
- 27/54 built-in modules

IPy 1.1

- Shipped April 2007
- Limited v2.5 language features
- More Modules
- Top user issues
- VS Integration (VSX sample)

IPy 2.0

- Current Focus
- Fall 2008
- v2.5 language compatibility
- Built on DLR
- More modules
- Top User Issues

IPy 2.6

- Alpha Released
- H1 2009
- v2.6 language compatibility
- Productize VS integration

IPy 3.0

- In Planning
- H2 2009 ?
- Python 3000 language compatibility
- Support for next version of VS

IronRuby Roadmap

IronRuby 0.3

- Now

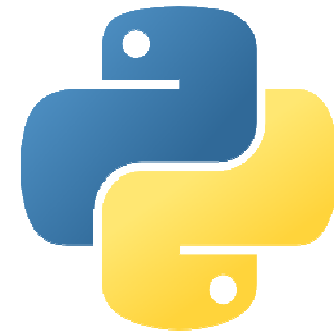
IronRuby 1.0

- Targetting mid '09
- Ruby on Rails

<http://ironruby.net/>



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