

IronRuby

IronRuby

ironruby.net

github.com/ironruby

jimmyschementi.com/blog

github.com/jschementi/rubyconf2009

5 mins

What's IronRuby and what's it useful for?

10 mins

Ruby HTML script-tags

15 mins

Embedding Ruby – “Scriptable” apps

10 mins

State of IronRuby

Ruby 1.8.6 compatible

- Some 1.9 features (like encoding, -19 flag)
- Does not support callcc, ObjectSpace, native extensions
 - Though local callcc is coming ...
 - Considering FFI support for native extensions

CLR 2.0 SP1 | Mono 2.0

- Browser plugin: Silverlight | Moonlight
- Windows, MacOS, major Linux distros

Terminal — bash — 87x9

```
jimmy-felicia-air:bin jimmy$ mono ir.exe igem install activerecord --no-ri --no-rdoc  
Successfully installed activerecord-2.3.4  
1 gem installed  
jimmy-felicia-air:bin jimmy$
```

```
jimmy-felicia-air:bin jimmy$ mono ir.exe irails Foo
```

```
create
```

```
create app/controllers
```

```
create app/helpers
```

```
create app/models
```

```
create app/views/layouts
```

```
create config/environments
```

```
create config/initializers
```

```
create config/locales
```

```
create db
```

```
create doc
```

```
create lib
```

```
create lib/tasks
```

```
create log
```

```
create public/images
```

```
create public/javascripts
```

```
create public/stylesheets
```

```
create script/performance
```

```
create test/fixtures
```

```
create test/functional
```

```
create test/integration
```

```
create test/performance
```

```
create test/unit
```

```
create vendor
```

IronRuby at OSCON 2009

Mono, Moonlight, and scripting
open source apps

What sets IronRuby apart?

A premiere implementation for Windows

- ❖ Win32, .NET, DirectX
- ❖ Systems management
- ❖ Web deployment on IIS
 - ❖ wiki.rubyonrails.org: 51% of traffic is from Windows

Browser apps

- ❖ HTML and vector graphics/UI

Embedding and Scripting

- ❖ Polyglot (using multiple language) and/or extensibility (exposing a language to end-users)

5 mins

What's IronRuby and what's it useful for?

10 mins

Ruby HTML script-tags

15 mins

Embedding Ruby – “Scriptable” apps

10 mins

State of IronRuby

```
<html>
```

```
<head>
```

```
<script
```

```
  type="text/javascript"
```

```
  src="http://gestalt.ironruby.com/d1/dlr/dlr.js"
```

```
></script>
```

```
</head>
```

```
<body>
```

```
<script type="text/ruby">
```

```
  window.alert "Hello World from Ruby"
```

```
</script>
```

```
</body>
```

```
</html>
```

Demo (<http://ironruby.com/browser>)

<SCRIPT TYPE="TEXT/RUBY">

Silverlight 4

New features:

- ❖ Full trust applications (file-system access)
- ❖ Webcam and Microphone
- ❖ Rich Text
- ❖ Notifications
- ❖ Clipboard

45% of internet-connected Windows and Mac machines have Silverlight

5 mins

What's IronRuby and what's it useful for?

10 mins

Ruby HTML script-tags

15 mins

Embedding Ruby – “Scriptable” apps

10 mins

State of IronRuby

NEW!


Jimmy Dean

Pancakes & Sausage

ON A STICK

Pancake Batter Covering a Sausage Link

14

**Chocolate
Chip**

NET WT 35 OZ (2.18 LB) 992g

NO ARTIFICIAL FLAVORS
NO PRESERVATIVES

MICROWAVABLE

INDIVIDUALLY
WRAPPED

60122205 USE BY





Extensibility with scripts

- ❖ let everyone make your app great too

Ruby is simple enough for non-programmers

- ❖ writing tiny scripts for themselves

Powerful enough for adding full features

- ❖ ecosystem for extensions develops
- ❖ deployment of fixes / new features simplified

More choices than Ruby

- ❖ Python, Scheme, Clojure

Demo

FIXING THE WORST APP EVER

5 mins

What's IronRuby and what's it useful for?

10 mins

Ruby HTML script-tags

15 mins

Embedding Ruby – “Scriptable” apps

10 mins

State of IronRuby

IronRuby 1.0 RC1

<http://ironruby.net/download>

Performance

- ❖ Goal: *faster* than MRI
- ❖ Goal: within order-of-magnitude of JRuby

Throughput

- ❖ Example: ruby-benchmark-suite
- ❖ 2x faster than MRI via RubyInstaller
- ❖ 6x faster than MRI via One-Click Installer
- ❖ -1.5x slower than JRuby
- ❖ Need to improve a bit on this by 1.0

Startup

- ❖ Example: `require 'activesupport'`
- ❖ 4x slower than MRI via RubyInstaller
- ❖ 2x slower than Jruby
- ❖ A must-fix for 1.0 – must be on par with JRuby

Compatibility

- ❖ Goal: > 90% passing
- ❖ Must have really good reason for each failing RubySpecs

RubySpec: 92%

- ❖ Language: 97%
- ❖ Core: 91%
- ❖ Libraries: 93%

Libraries

- ❖ RubyGems: 96%
- ❖ ActionPack: 95%
- ❖ ActiveSupport: 95%

CLR Integration

- ❖ Goal: use majority of CLR features from Ruby without needing C# stubs

Only major missing feature

- ❖ No support for any CLR feature which depends on a CLR type actually existing (Attributes, property data binding, etc)
- ❖ OK to ship 1.0 without it

Roadmap to 1.0

- ❖ Today: 1.0 RC1
- ❖ RC2, 3, etc, will come as needed
- ❖ RC build becomes *final* if no must-fix-for-RC bugs are accepted for a few weeks.

Work still left to do

- ❖ Startup perf: largest factor in perceived slowness
- ❖ Throughput perf: related to startup, but will focus on library implementations.
- ❖ Bugs: 50 open bugs, plus whatever bump the RC gives

Post 1.0

- ❖ Post 1.0 releases will resume in a 2 month cycle.
- ❖ Visual Studio Integration
 - Colorization, code-completion, project system, cleaner debugger, REPL, etc.
 - Largest requested VS2010 feature!

IronRuby Integration In Visual Studio 2010 by

MLetterle



510

23



[Sign in](#)
to vote

Type:	Suggestion
ID:	479957
Opened:	7/31/2009 12:52:03 PM
Access Restriction:	Public

ironruby-contrib

cucumber on .NET with IronRuby

caricature Mocking static types with IronRuby

ironruby.rack rack-based web apps on IIS

ironruby-dbi port of dbi – enables current ActiveRecord/DataMapper SQLServer/SQLite# to just work with IronRuby

ironmvc IronRuby support for ASP.NET MVC applications

gestalt replacing JavaScript with Ruby (now merged into IronRuby)

magic a UI framework for Ruby

Questions?

ironruby.net

jimmyschementi.com/blog