

# Ruby on RaIDS

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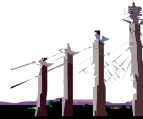
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Monday, April 28, 2008 • 4:40 p.m. – 5:40 p.m.

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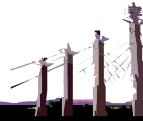
## In a Nutshell

- Ruby on Rails works with IDS (Cheetah and later)  
aka Ruby on RaIDS
- Rails is a web application framework that:
  - is easy to use
  - makes development much faster



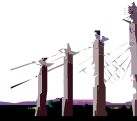
## Agenda

- Basics
- Characteristics of Rails
- How to Use Ruby on Rails with IDS
- Demo
- Resources



## Basics

- What is Ruby?
- What is Rails?
- How does Ruby relate to Rails?
- How are they related to IDS?



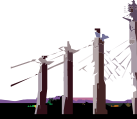
## Characteristics of Rails

### Concepts/Technologies

- MVC - Model View Controller
- ORM - Object Relational Mapping
- “migrations” – database schema versioning

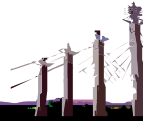
### Principles

- Don't Repeat Yourself
- Convention Over Configuration



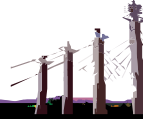
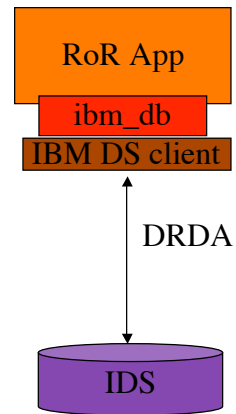
## Using Ruby on Rails with IDS

- Setup
  - Required Software
  - Configure Rails
  - Configure IDS
- A Simple Web App in 8 Steps



## Required Software

- Ruby – 1.8.6 (latest stable release)
- Rails – 1.2.4 (not 2.0)
- IBM Rails Adapter – 0.9.2  
\$ gem install ibm\_db
- IDS server – Cheetah (11.10) or later
- IDS client – one of:
  - IBM Data Server Client
  - IBM Data Server Runtime Client
  - IBM Data Server Driver for ODBC, CLI and .NET



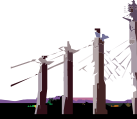
## Configure Rails to use IBM's adapter

What?

Let Rails know that you want to use IBM's adapter

How?

- 1) Locate the file:  
`<ruby_install_dir>\lib\ruby\gems\1.8\gems\activerecord-1.15.4\lib\active_record.rb`
- 2) Add "ibm\_db" to the adapters line:  
`RAILS_CONNECTION_ADAPTERS = %w( mysql postgresql  
sqlite firebird ... frontbase ibm_db )`





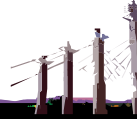
## Configure IDS to accept DRDA

What?

Tell IDS to accept DRDA connections

How?

- 1) Create a new server alias (in SQLHOST/Windows registry) that uses “dr” (e.g. **drsotcp**, **drtlitcp**)
- 2) Specify that alias in ONCONFIG’s DBSERVERALIASES



## “Hello World” 1/4

- 1) Create your IDS database
- 2) Create your application's Rails framework

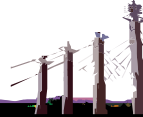
```
$ rails HelloWorld
```

```
$ cd HelloWorld
```

- 3) Enter your development DB info

Modify config/database.yml

```
development:
  adapter: ibm_db
  database: <database>
  username: <user>
  password: <password>
  host:    <host> # e.g. cheetah, cheetah.ibm.com, 255.201.26.250
  port:    <port> # e.g. 8123, service_name
```



## “Hello World” 2/4

- 4) Create the model for a database-backed table
  - a. \$ ruby script/generate model saying
  - b. Edit helloWorld/db/migrate/001\_create\_sayings.rb to contain the desired columns

- 5) Create the table in the database

\$ rake db:migrate

```
class CreateSayings < ActiveRecord::Migration
  def self.up
    create_table :sayings do |t|
      t.column :say_what, :string
      t.column :said_when, :date
    end
  end

  def self.down
    drop_table :sayings
  end
end
```



## “Hello World” 3/4

6) Create a controller for the model

```
$ ruby script/generate controller saying
```

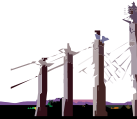
7) Tell the controller to use dynamic scaffolding

Edit helloWorld/app/controllers/saying\_controller.rb

```
class SayingController < ApplicationController
  scaffold:saying
end
```

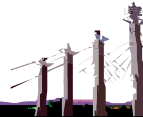
8) Start the webserver

```
$ ruby script/server
```

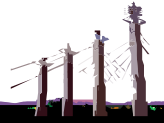
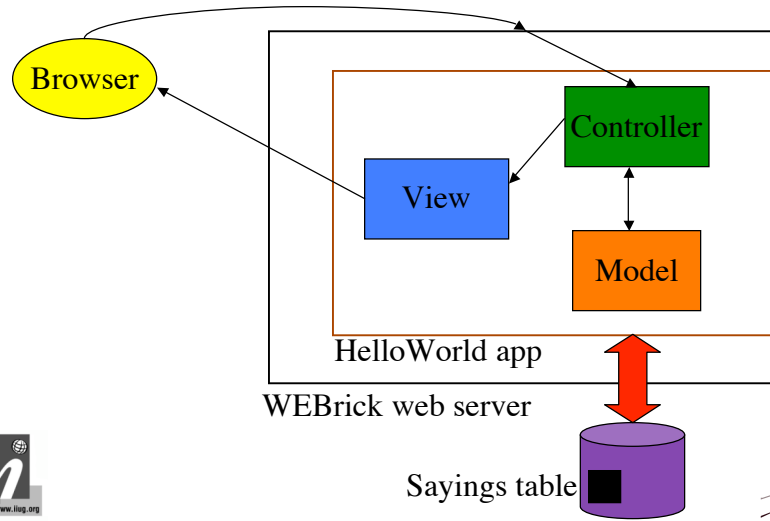


# “Hello World” 4/4

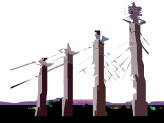
Access your application at <http://localhost:3000/saying>



# What just happened?

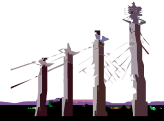


# Demo



## Conclusion

- Ruby on Rails can make you a very productive web application developer!
- Using Rails with IDS requires a few quick steps
- Try it out yourself!





## Resources

- IDS

One Stop Shop: <http://www-306.ibm.com/software/data/informix/ids/ad/ruby.html>

DRDA <http://publib.boulder.ibm.com/infocenter/idshelp/v111/topic/com.ibm.admin.doc/admin153.htm#admin03drda>

- Ruby - <http://www.ruby-lang.org/>

- Rails - <http://www.rubyonrails.org/>

- InVisible Reference <http://blog.invisible.ch/files/rails-reference-1.1.html>

- IBM Data Server clients

Info: <http://publib.boulder.ibm.com/infocenter/db2luw/v9r5/index.jsp?topic=/com.ibm.db2.luw.qb.client.doc/doc/I0007315.html>

Download: [https://www14.software.ibm.com/webapp/wm/web/preLogin.do?lang=en\\_US&source=swg-informixfpd](https://www14.software.ibm.com/webapp/wm/web/preLogin.do?lang=en_US&source=swg-informixfpd)

- Web Application Frameworks

- [http://en.wikipedia.org/wiki/Comparison\\_of\\_web\\_application\\_frameworks](http://en.wikipedia.org/wiki/Comparison_of_web_application_frameworks)

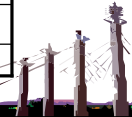


## Type Mapping

Rails Type	IDS SQL Type
id	serial
binary	BLOB
boolean	smallint
date	date
datetime	datetime year to fraction(5)
decimal	decimal(16)
float	float
integer	integer
string	varchar(255)
text	CLOB
time	datetime hour to second
timestamp	datetime year to fraction(5)



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Session B06  
Ruby on RaIDS

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