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#### Inhalt



Vorstellung
 JRuby – Eigenschaften & Anwendung
 JRuby on Rails

 a. Java WebApps (Servlets, JSP, JEE AS ...)
 b. Hands-On: Rails 3.0 in Tomcat 7.0

### 1. Vorstellung



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- Student Informatik Universität Bonn Schwerpunkt: Inter Domain Routing (IDR, BGP)
- Werksstudent anderScore GmbH seit 2007 - http://anderScore.com
- Ruby on Rails seit 12/2007 (v. 1.2.6)
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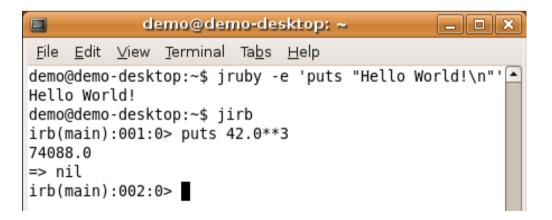


### 2. JRuby - Eigenschaften



- Zweck:
   Ruby 1.8 / 1.9 Implementation
   für die JVM
- Aktuelles Release:
   jruby 1.6.0 2011-03-15
   (ruby 1.8.7 patchlevel 330)
- Quelle: http://jruby.org





# 2. JRuby - Anwendung



JSR 223: Scripting for the JavaTM Platform

```
public class EvalScript {
   public static void main(String[] args) throws Exception {
        ScriptEngineManager factory = new ScriptEngineManager();
        ScriptEngine engine = factory.getEngineByName("jruby");
        if(engine == null)
            throw new RuntimeException("JRuby not found ");
        engine.eval("puts 'Hello World!\n'");
    }
}
```

Zugriff auf Java-APIs aus Ruby

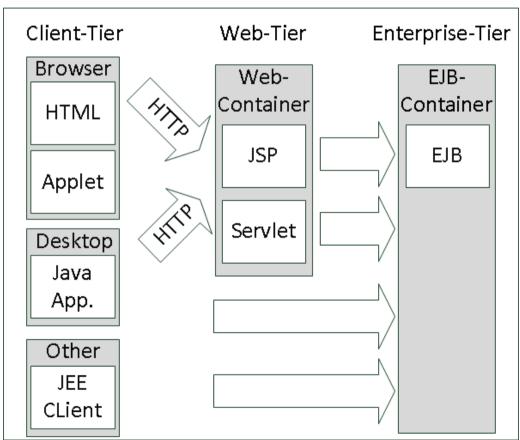
```
#code.rb
require 'java'
frame = javax.swing.JFrame.new "Test-Frame"
frame.setSize 200,200
frame.show
```

Sonst. Anwendungsfälle (z.B. Ruby-Code in Scala/Lift Anwendungen ...)

## 3.a WebApps in Java



- Grundlage: Servlets & JavaServerPages
  - Bestandteil der Java Enterprise Edition (JEE)
  - Aktuell: Java EE 6 (JSR 316), Java Servlets 3.0 (JSR 315) Java Server Pages 2.2 (JSR 245)

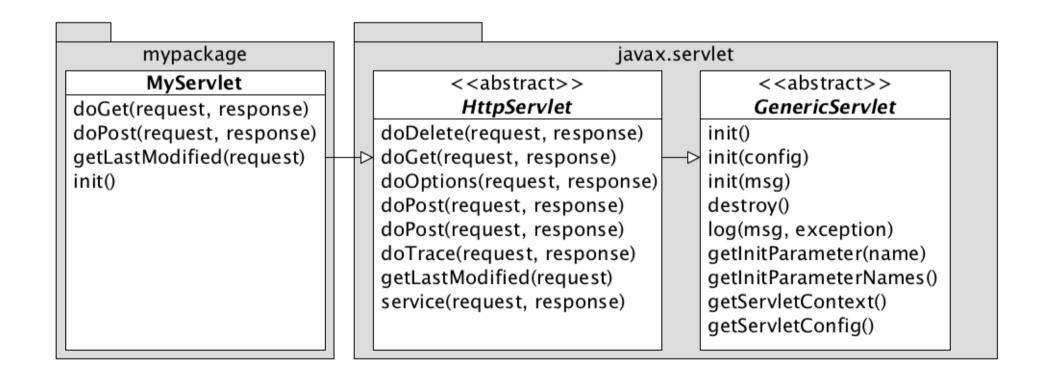


JEE - Tiers (vereinfacht)

### 3.a WebApps in Java



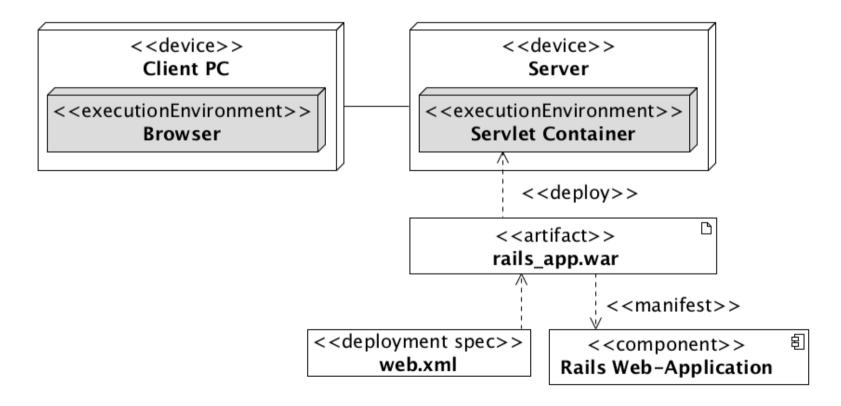
- Java Servlets
  - Deployment in "Inversion-Of-Control"-Container
  - API bildet HTTP-Requests ab



## 3.a WebApps in Java



- Java Servlet Deployment: Web Application Archives (.war)
  - Erzeugen mit: warbler (Ruby gem)
  - ZIP-Archiv: kompilierte Servlets + statische Daten
  - web.xml (Deployment Descriptor)



#### 3.b Rails 3.0 in Tomcat 7.0



#### Hands-On ...

```
### Rails installieren ###
$ jruby -S gem install rails
$ jruby -S gem install activerecord-jdbcsqlite3-adapter #sqlite...
### Neue Anwendung erzeugen ###
$ jruby -S rails new JRubyOnRails
# In Gemfile eintragen:
# gem 'activerecord-jdbcsqlite3-adapter' statt gem 'sqlite3'
# Zur Vereinfachung: sqlite-in-memory aktivieren:
# database: ":memory:" (in database.yml)...
### Development-Server ###
$ cd JRubyOnRails
$ jruby script/rails server
### Deployment ###
$ jruby -S gem install warbler #Install warbler
$ irubv -S warble war
```

#### Demo



#### Quellen:

[jsr223]	http://jcp.org/en/jsr/detail?id=223
[pawlan07]	http://java.sun.com/developer/technicalArticles/scripting/jruby/

#### Links:

- http://jruby.org
- http://www.ibm.com/developerworks/opensource/library/ os-ad-prototype-jruby/
- http://caldersphere.rubyforge.org/warbler/