

ROR ADMINISTRATION

2 DAY CLASS

DEBUGGING

- Pry
- Airbrake
- better_errors
- NewRelic

CACHING

- Caching data
- Caching Assets
- CDN

STAYING CURRENT

- Gemnasium
- Ruby on Rails Blog

MONITORING

- God (ruby gem, very simple)
- Monit
- Nagios

SECURITY

- Least Privilege
- Secure Defaults
- Defense in Depth

SECURITY ISSUES

- Session Hijacking (firesheep)
- Brute Force Attacks (psswd stolen, sha1: 9 chars, 7 years)
- Insecure Direct Reference (proper auth)
- Mass Assignment
- CSRF (watch for GET)
- Offsite Redirects
- Unexpected Code Execution (routes, and render)
- SQL Injection ([http:// rails-sqli.org/](http://rails-sqli.org/))
- XSS (sanitize)
- YAML Injection (<http://blog.codeclimate.com/blog/2013/01/10/rails-remote-code-execution-vulnerability-explained/>)

BRAKEMAN

- <http://brakemanscanner.org/>
- <https://github.com/presidentbeef/brakeman>
- <http://brakemanscanner.org/docs/options/>

DEPLOYMENT

- Capistrano / Capistrano-Multistage
(RVM & Bundler)
- Git
- Rake

CONFIGURATION

- Environment Variables
- Config Files
- Chef DataBags

DATABASE

- SQL
 - MySQL (RDMS)
 - PostgreSQL (ORDMS)
 - Sqlite
 - MSSQL, Oracle, DB2
- NoSQL
 - MongoDB
 - CouchDB
 - Hadoop

DATABASE COMPARISONS

- http://en.wikipedia.org/wiki/Comparison_of_relational_database_management_systems#Operating_system_support
- <http://www.slideshare.net/octplane/mongodb-vs-mysql-a-devops-point-of-view>

APPLICATION SERVERS

- Rails Application Processing
- Passenger
- Thin (EventMachine)
- Unicorn (Good with Low Latency)

WEB SERVERS

- Nginx
- Apache

SCALING

- Horizontal (Moar Stuff!)
- Vertical (Moar Power!)
- Code School Videos Scaling Rails

DB SCALING

LOAD BALANCING

- HA Proxy
- HeartBeat
- Nginx (SSL Off Loading)
- Apache Round Robin

LOAD BALANCING / SCALE

- <http://www.slideshare.net/salizzar/porting-rails-apps-to-high-availability-systems> (slide 49)

RAILS SERVER NEEDS

- unprivl user (deploy) with this in the path
- ruby (rvm)
- ruby gems
- Webserver (nginx, apache) (typically user running is in the same group as deploy (like www))
- - environment vars set by the web server
- - points to the public directory
- Application server (passenger, thin, unicorn)
- App Directory (public)
- Assets compiled
- Database (MySQL, Mongo, PostGresQL, etc...)
- Database configuration
- Configuration files
- (passenger and rvm - configure load paths...)