## 1 Rails Application Documentation

Build this documentation with either rake doc:\* for standard rails doc output, or with the rake doc:ajax task to get nicer doc layout using breakpointer's ajax-rdoc (which is available at <a href="http://github.com/breakpointer/ajax-rdoc»github.com/breakpointer/ajax-rdoc</a> and has to installed separately).

### Installation

The first step is to run these rake tasks:

```
rake db:migrate
rake db:seed
```

Now the database is fully migrated and seeded. Start the webserver with

```
rails server
```

A setup screen will be ready at <a href="http://localhost:3000>localhost:3000</a>

## Starting points for further reading

#### Search API

For any information on the search functionality of the app, take a look at the Search module.

#### Matching API

For any information on the matching of Freight and LoadingSpace objects, take a look at the Matching module.

### 2 Class: ActiveRecord::Base

#### Public Class methods

```
\mathbf{brackets\_find\_by}(attribute\_name)
```

Adds a convenient [] find\_by to the model utilizing the given attribute and returning the first record matching the condition. Therefore this is best used on attributes that go through validates\_uniqueness\_of.

```
class Country < ActiveRecord::Base
    brackets_find_by :iso_code
end

Country[:de] => #<Country id: 1, name: "Germany", iso_code: "de">
human_attribute_value(attribute_name, value, i18n_opts = {})

searchable(opts = {})

Adds a model to the search index.

class User < ActiveRecord::Base
    searchable
end</pre>
```

#### Public Instance methods

```
attributes_filled()
belongs_to?(user = current_user)
Returns if the record belongs to a certain user.
human_attribute_value(attribute_name, i18n_opts = {})
mine?(user = current_user)
Alias for belongs_to?
```

## 3 Class: AppConfig

AppConfig objects store system specific configuration values for the application.

## Reading

Read any value from the database (or the default config yaml, if it is not yet in the db) by using the [] accessor.

```
AppConfig[:language] # => "en"
```

### Storing

Store any value in the database by using the []= accessor.

```
AppConfig[:language] = 'de' # => "de"
AppConfig[:some_option] = 'some value' # => "some value"
```

### Public Class methods

### AppConfig[key] # => Object

Returns the value stored for key in the database or its default value.

```
AppConfig[:language] # => "en"
```

#### AppConfig[key] = value

Stores the value for key in the database.

```
AppConfig[:language] = 'de' # => "de"
```

## 4 Class: ApplicationController

#### Private Class methods

```
login required(opts = \{\})
Use this in a controller to restrict access.
  class UsersController < ApplicationController</pre>
    login_required :only => [:edit, :update, :show]
  end
{\bf ownership\_required}(\mathit{opts} = \{\})
Use this in a controller to restrict access to owners.
role\_or\_ownership\_required(roles, opts = \{\})
Use this in a controller to restrict access to either users of certain roles (e.g. admins) or
the rightful owner of an object.
  class PostingController < ApplicationController</pre>
    role_or_ownership_required [:posting_admin, :administrator]
  end
role required(roles, opts = \{\})
Use this in a controller to restrict access to either users of certain roles (e.g. admins).
  class Admin::BaseController < ApplicationController</pre>
    role_required :administrator
  end
same company required (opts = \{\})
```

### **Private Instance methods**

### current company()

Returns the Company object of the currently logged in user or nil if no user is logged in.

### current person()

Returns the Person object of the currently logged in user or nil if no user is logged in.

### current user()

Returns the User object of the currently logged in user or nil if no user is logged in.

### demo mode?()

Returns true if the application is running in demo mode.

## 5 Module: ApplicationHelper

### Public Instance methods

localized info field (f, name, lang)

```
clear\_both()
Returns a DIV tag that clears floating.
collection choices(model, attribute\_name, const = nil)
Returns the collection of localized choices for a given attribute. Example:
  collection_choices(Person, :gender)
This will look up Person::GENDER_CHOICES and return the keys and localized values.
controller?(name) \# => boolean
Returns if c is the current controller. Example:
  <%= controller?(:root) %>
  # => true
format multiline input (text)
Returns a HTML formatted version of text. Example:
  <%= format_multiline_input("First line.\nSecond Line.") %>
  # => "First line.\Second line."
link back(text = t("common.link\_back"))
Returns a link back to the last visited page with a localized caption.
link to unless(condition, name, options = {}), html\_options = {}), &block)
TODO: lookup rails3 implementation
localized info(obj, name, lang = I18n.default\_locale)
Returns a formatted string for the associated LocalizedInfo object.
```

```
TODO: localized_info_field f, :type_of_goods, :en
BETTA: f.localized info field:type of goods,:en
only some attributes filled? (ar)
render company info(company)
Renders a partial with the contact information for the given company. Example:
  <%= render_person_info current_company %>
render person info(person)
Renders a partial with the contact information for the given person. Example:
  <%= render_person_info current_person %>
render\_table(arel)
Renders a table for the given ActiveRelation. Example:
  <%= render_table User.all %>
yes no(condition)
```

# 6 Class: CompaniesController

## **Public Instance methods**

create()
dashboard()
new()
The Companies#new action is actually the "Create a new Account..."

The Companies#new action is actually the "Create a new Accountscreen a user sees when he signs up for the freight exchange.

show()

# 7 Module: CompaniesHelper

## Public Instance methods

 ${\bf registering\_new\_account?}()$ 

# 8 Class: Company

Companies are organising Users.

## **Public Instance methods**

### ensure\_admin()

Ensures there is at least one :company\_admin left. If no admin can be found, the first user of the company is assigned the admin role.

9 Class: Freight 11

# 9 Class: Freight

## **Public Instance methods**

```
localized_info(name, lang = I18n.default_locale)
localized_infos=(array_of_options)
to_search()
update_localized_infos()
```

# 10 Class: FreightsController

## Public Instance methods

 ${f create}()$   ${f new}()$   ${f update}()$ 

# 11 Class: LoadingSpace

## **Public Instance methods**

```
localized_info(name, lang = I18n.default_locale)
localized_infos=(array_of_options)

to_search()
update_localized_infos()
```

# 12 Class: LoadingSpacesController

## Public Instance methods

 ${f create}()$   ${f new}()$   ${f update}()$ 

# 13 Class: LocalizedInfo

## Public Instance methods

 ${\bf update\_or\_destroy!}()$ 

## 14 Class: Matching::Compare::Base

Compare objects compare two objects A and B based on their type/class.

#### Creation

Compare objects accept two constructor parameters for the A and the B object.

```
compare = Compare::String.new('one string', 'another string')
compare.result # => 0.6428...
```

#### **Conditions**

By default, a compare object compares copies of the entire objects it is passed. It is also possible to only compare certain attributes of an object.

```
class UserComparer < Matching::Compare::Base
  compare :gender, :weight
end</pre>
```

Thresholds can be used to ensure that only objects who meet certain criteria are considered alike.

```
class UserComparer < Matching::Compare::Base
  compare :weight, :threshold => 10

# => User A can be 10 kilos heavier or lighter than user B

compare :weight, :threshold => 0.05

# => User A can be 5% heavier or lighter than user B

compare :weight, :threshold => {:up => 0, :down => 0.1}

# => User A can be 10% lighter than user B, but not any heavier.

compare :weight, :threshold => :perfect

# => User A and B have to have the same weight
end
```

All object-pairs not meeting the threshold criteria are automatically assigned a result of 0.0 (not matching at all).

### Overwriting defaults

Blocks can be used to override the default comparisions.

Example:

```
class UserCompanyComparer < Matching::Compare::Base
  # Do not compare the email with the default String processor
  # but compare the email hosts and eliminate the pair if they
  # are not matching.
  compare :email do |a, b|
   email_domain = /[^@]+$/
   a[email_domain] == b[email_domain]
  end
end</pre>
```

#### Public Class methods

```
compare(*attributes, options = {}, &block)
```

Specifies one or more attribute(s) that will be compared using the defined options and the block, if given.

#### Options

• : as - A Symbol identifying the Comparer class to be used

```
(e.g. :String, :Time etc.)

class UserComparer < Matching::Compare::Base
    compare :created_at, :as => :Time
    end
```

• : threshold - If the attribute of the B object differs more

than the given threshold the comparison fails, resulting in a 0.0 match. : up and :down options are available as well. Floats are interpreted as relative, Fixnums as absolute thresholds.

```
class UserComparer < Matching::Compare::Base
  compare :weight, :threshold => 10
# => User A can be 10 kilos heavier or lighter than user B
```

```
compare :weight, :threshold => 0.05
# => User A can be 5% heavier or lighter than user B

compare :weight, :threshold => {:up => 0, :down => 0.1}
# => User A can be 10% lighter than user B, but not any heavier

compare :weight, :threshold => :perfect
# => User A and B have to have the same weight
end
```

**Block evaluation** If a block is given, the compared attributes are passed and the result of the block is the final result for the comparison (with true being interpreted as 1.0).

```
class UserComparer < Matching::Compare::Base
  compare :email do |a, b|
    email_domain = /[^@]+$/
    a[email_domain] == b[email_domain]
  end
end</pre>
```

#### new(a, b)

Create a new Compare object to compare the given objects.

#### Public Instance methods

#### result()

Compares two objects and returns a result between 0.0 (not alike) and 1.0 (perfect match).

Examples:

```
Comparer::Base.new(true, false) # => 0.0
Comparer::Base.new(true, true) # => 1.0
```

## Protected Instance methods

```
 \begin{split} \mathbf{calc\_result}(hsh) \\ \mathbf{compare\_attribute}(attr,\ opts = \{\}) \\ \mathbf{compare\_attributes\_and\_calc\_result}() \\ \mathbf{compared\_attributes}() \\ \mathbf{comparer\_for}(klass) \\ \mathbf{in\_threshold}(x,\ y,\ result,\ threshold = \{\}) \\ \mathbf{Floats}\ \text{are interpreted as relative},\ \mathbf{Fixnums}\ \text{as absolute thresholds}. \end{split}
```

# 15 Class: Matching::Compare::Fixnum

Compares two fixnum objects.

## **Public Instance methods**

# 16 Class: Matching::Compare::FreightToLoadingSpace

FreightToLoadingSpace objects compare Freight with LoadingSpace objects and return a result how good they match.

# 17 Class: Matching::Compare::Hash

Compares to two hashes by comparing all values of hash A with their counterparts in hash B.

## **Public Instance methods**

# 18 Class: Matching::Compare::String

Compares two strings using Levenshtein distance.

## Public Instance methods

# 19 Class: Matching::Compare::Time

Compares two time objects.

## **Public Instance methods**

# 20 Module: Matching::Compare

The Compare module provides a set of classes and methods to match objects like Strings, Numbers and Dates.

# 21 Module: Matching

The Matching module provides a set of classes and methods to match objects. On top of this, it provides an extendable generic API for matching Freight and LoadingSpace objects (see compare\_freight\_and\_loading\_space method).

### Public Class methods

 $\label{loading_space} $$\operatorname{Match.compare\_freight\_and\_loading\_space}(freight, loading\_space) \ \# => Float \ \operatorname{Match.fls} freight, loading \ space \ \# => Float$ 

Returns the likeness of a Freight and a LoadingSpace object.

Match.fls Freight.first, LoadingSpace.first # => 0.977920227850516

22 Class: Object 27

# 22 Class: Object

### **Public Instance methods**

```
obj.full? obj.full? \{ |f| \dots \}
```

Returns wheter or not the given obj is not blank? If a block is given and the obj is full?, the obj is yielded to that block.

```
salary = nil
salary.full? # => nil
salary.full? { |s| "#{s} $" } # => nil
salary = 100
salary.full? { |s| "#{s} $" } # => "100 $"
```

With Rails' implementation of Symbol#to\_proc it is possible to write:

```
current_user.full?(&:name) # => "Dave"
```

23 Class: Person 28

# 23 Class: Person

Person objects contain personal information about a User.

## **Public Instance methods**

name()

TODO: Anrede?

# 24 Class: Posting

# Public Instance methods

```
to_search() validate()
```

# 25 Class: RootController

## **Public Instance methods**

 $\mathbf{about}()$   $\mathbf{index}()$   $\mathbf{welcome}()$  This action decides what to do with a freshly logged in user.

26 Module: Search 31

## 26 Module: Search

search.rb

The Search module acts as a wrapper to whatever search engine is running in the background.

#### Public Class methods

```
Search.clear index for(record)
```

Removes the search index for the given record.

```
user = User.create(:name # => 'Bob') # => #<User id: 1, name: "Bob">
Search.find 'bob' # => [#<User id: 1, name: "Bob">]
Search.clear_index_for(user)
Search.find 'bob' # => []
```

### Search.count(query) # => int

Returns the total number of results.

```
Search.count "some query"
```

```
Search.find(query) \# => array Search.find(query, models) \# => array Search / query \# => array
```

Returns the matching records from the database.

```
Search.find "some query"
Search.find "Berlin", [User, Company])
Search / "some other query"
```

### Search.update\_index\_for(model\_or\_record) Search

Adds a record or a model to the search index.

```
Search << User.first # update the index for a specific user
Search << User # update the index of all users
```

# 27 Class: SearchController

## Public Instance methods

index()

28 Class: SiteInfo 33

# 28 Class: SiteInfo

SiteInfo objects contain information about loading and unloading sites, such as name of the site, address of the site, name of the contractor etc.

29 Class: Station 34

# 29 Class: Station

## Public Instance methods

 $\mathbf{to}_{-}\mathbf{search}()$ 

30 Class: User

## 30 Class: User

User objects respresent a user of the system and are used to authenticate users upon login (using acts\_as\_authentic plugin) and handle permission handling via assigned UserRole objects.

Data concerning the actual, human user (like company, gender, language etc.) is stored in associated Person and Company objects.

### Public Instance methods

```
user.has_role?(role_name) # => boolean
Returns true if a user has a UserRole with the given name.

user.has_role?(:administrator) # => true

is?(name)
Alias for has_role?

user.roles # => array
Returns an array of role names.

user.roles # => ["administrator", "company_admin"]
```

31 Class: UserRole 36

### 31 Class: UserRole

UserRoles grant a logged in User access to certain parts of the application.

### Creation

UserRoles are created and identified via their :name attribute.

```
UserRole.create(:name => 'employee_of_the_month')
```

### Find by name

UserRoles can be found via their: name attribute using the [] accessor.

```
UserRole[:employee_of_the_month]
```

## **Assigning**

Finally, UserRoles can be eassigned to a User with the « operator.

```
user.user_roles << UserRole[:employee_of_the_month]</pre>
```

To access the backend e.g. a user must have administrator priviligues:

```
user.user_roles << UserRole[:administrator]</pre>
```

This is also used in the frontend to restrict the priviligues of users in companies.

```
user.user_roles << UserRole[:company_admin]</pre>
```

# 32 Class: UsersController

## **Public Instance methods**

### create()

This creates a new user inside the current company. For the original sign up screen, see Companies#new.

## $\mathbf{index}()$

Lists all users in the current company.

# 33 Class: UserSession

## **Public Class methods**

UserSession.login(user) # => boolean

Authenticates a user and logs him in.

UserSession.login(User.first) # => true

## 34 Class: UserSessionsController

The UserSessions Controller handles all requests regarding logging in and out.

### **Public Instance methods**

### create()

Authenticates a User by creating and saving a UserSession.

### $\mathbf{demo\_login}()$

This action is only available if the application is running in demo mode. It creates a UserSession for a given user without any authentication.

### destroy()

Logs a user out.

new()