## 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.

## 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?
```

# Class: Admin::BaseController

The BaseController is the controller every other backend controller inherits from. He is mainly responsible for providing basic functionality to the backend, e.g. rights management.

# Module: Admin::BaseHelper

The BaseHelper provides basic helper methods all backend views.

## **Public Instance methods**

```
\mathbf{link\_new}(\textit{text} = \textit{t(\"{a}dmin.common.new\_link"}), \textit{url} = \textit{new\_resource\_url})
```

Renders a link to the new action of the current resource.

```
{\bf render\_table}(\mathit{arel})
```

Renders a table for a given ActiveRelation.

Example:

```
<%= render_table User.all %>
```

# 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"
```

## 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

### controller catalog(

Returns the i18n catalog path for the current controller.

```
class UsersController < ApplicationController
  def index
    controller_catalog # => 'users'
  end
end

class Admin::UsersController < Admin::BaseController
  def index
    controller_catalog # => 'admin.users'
  end
end
```

### current company()

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

```
{f current\_person}()
```

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

```
\mathbf{current}_{\mathbf{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.

# Module: ApplicationHelper

The ApplicationHelper provides basic helper methods for all views.

### **Public Instance methods**

```
admin?()
\mathbf{box}(title = nil, \mathcal{E}block)
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.

```
localized info field (f, name, lang)
```

```
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 %>
```

 $render partial(partial, options = \{\})$ 

```
render person info(person)
```

Renders a partial with the contact information for the given person. Example:

```
<%= render_person_info current_person %>
```

```
yes no(condition)
```

# Class: CompaniesController

## **Public Instance methods**

 ${\bf dashboard}()$   ${\bf new}()$  The Companies#new action is actually the "Create a new Accountscreen a user sees when he signs up for the freight exchange.

 $\mathbf{show}()$ 

# Module: CompaniesHelper

# Public Instance methods

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

# Class: Company

Companies are organising Users.

## **Public Instance methods**

## $\mathbf{ensure\_admin}()$

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.

# Class: Freight

## **Public Instance methods**

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

# Class: FreightsController

# Public Instance methods

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

# Class: LoadingSpace

## **Public Instance methods**

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

# ${\bf Class:\ Loading Spaces Controller}$

# Public Instance methods

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

# Class: LocalizedInfo

# Public Instance methods

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

## 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}
```

# Class: Matching::Compare::Fixnum

Compares two fixnum objects.

## **Public Instance methods**

# $Class: \ Matching:: Compare:: Freight To Loading Space$

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

# Class: Matching::Compare::Hash

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

### **Public Instance methods**

# Class: Matching::Compare::String

Compares two strings using Levenshtein distance.

## **Public Instance methods**

# Class: Matching::Compare::Time

Compares two time objects.

## **Public Instance methods**

# Module: Matching::Compare

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

# 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

# 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"
```

# Class: Person

Person objects contain personal information about a User.

## **Public Instance methods**

 $\mathbf{name}()$ 

TODO: Anrede?

# Class: Posting

# Public Instance methods

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

## Class: RootController

The RootController is the starting point of the application. On first start, it creates an admin user and guides him to the setup process. On login, it redirects users to their designated location. Additionally, the RootController also holds information about the app (e.g. the about action).

### **Public Instance methods**

### index()

The index action decides where the current\_user is redirected based on whether or not the app is already set up.

### welcome()

The welcome action decides what to do with a freshly logged in user.

### 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 Search.count(query, models) # = int

Returns the total number of results.

```
Search.count "some query"
Search.count "Berlin", [User, Company])
```

 $\begin{aligned} & \textbf{Search.find(query)} \;\# => \textbf{array Search.find(query, models)} \;\# => \textbf{array Search} \\ &/ \; \textbf{query} \;\# => \textbf{array} \end{aligned}$ 

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
```

# Class: SearchController

# **Public Instance methods**

 $\mathbf{index}()$ 

# 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.

# Class: Station

# Public Instance methods

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

## 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"]
```

## 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>
```

# Class: UsersController

## **Public Instance methods**

### create()

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

## index()

Lists all users in the current company.

# Class: UserSession

## **Public Class methods**

UserSession.login(user)~# => boolean

Authenticates a user and logs him in.

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

## 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.

## $\mathbf{destroy}()$

Logs a user out.

new()