

The Erlang Web Content Management System

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Erlang Training and Consulting Ltd
www.erlang-consulting.com

Michał Slaski
michal@erlang-consulting.com



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 - *Function annotations*
 - *Form builder*
 - *Cache*
 - *Support for two-tier architectures*
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Features of Erlang Web 1.3

- Annotations
 - *Define functions to be called before and after the controller*
- Form builder
 - *HTML form generated basing on Erlang record definition*
- Caching
 - *Stores pre-rendered parts of template or entire pages*
- Distribution
 - *Two-tier architectures with front-end and back-end nodes*
- Components
 - *Reusable plugins with support for Erlang Web*

Annotations

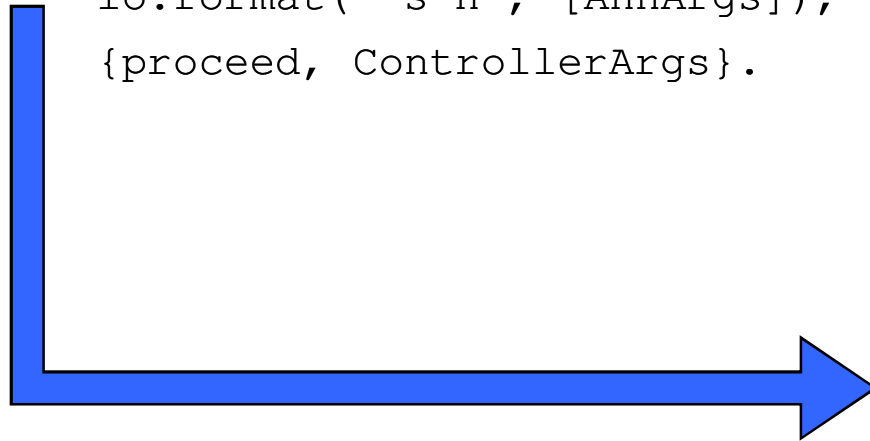
- Meta-language for controlling call flow
- Define functions to be called before executing the controller
 - *Authenticate user*
 - *Validate input data*
- And after executing the controller
 - *Invalidate cached entries*
 - *Log the activity*

Annotations

```
-module(my_utils).  
-export([logme/4]).  
-include_lib("eptic/include/e_annotation.hrl").
```

?BEFORE.

```
logme(AnnArgs, Mod, Fun, ControllerArgs) ->  
    io:format("~s~n", [AnnArgs]),  
    {proceed, ControllerArgs}.
```



```
-module(controller).  
-export([my_fun/0]).  
[...]
```

```
?LOGME("Calling my_fun").  
my_fun() ->  
    wpart:fget("post", "id"),  
    [...]
```

Form builder

- Generate HTML form to edit Erlang records
- The form can be rendered using
 - **HTML tables** - `<table><tr><th/><td/>`
 - **Paragraphs** - `<p id="..."><label>`
 - **Lists** - `<label>`
 - **Divs** - `<div id="..."><label>`

Form builder

- Form fields generated basing on Erlang records

article.hrl

```
-record(article, {  
    id,  
    text,  
    hide  
}).
```

```
-record(article_types, {  
    id = {integer, [...]},  
    title = {string, [...]},  
    hide = {enum, [...]}  
}).
```

templates/article.html

```
<wpart:form type="article"  
    action="/article/create" />
```

Article text

Is visible?

☒ Yes
☐ No

Submit Query

Caching

- **Caching result of calling a controller**

```
{dynamic, "^/blog/list", {blog, list}, [{cache, persistent}]}
```

- **Caching entire template**

```
{static, "^/faq$", "doc/faq.html", [{cache, normal}]}
```

- **Caching part of a template**

```
<wpart:cache id="left_menu" groups="menus" type="persistent">  
    SOME CONTENT  
</wpart:cache>
```


Invalidating cache

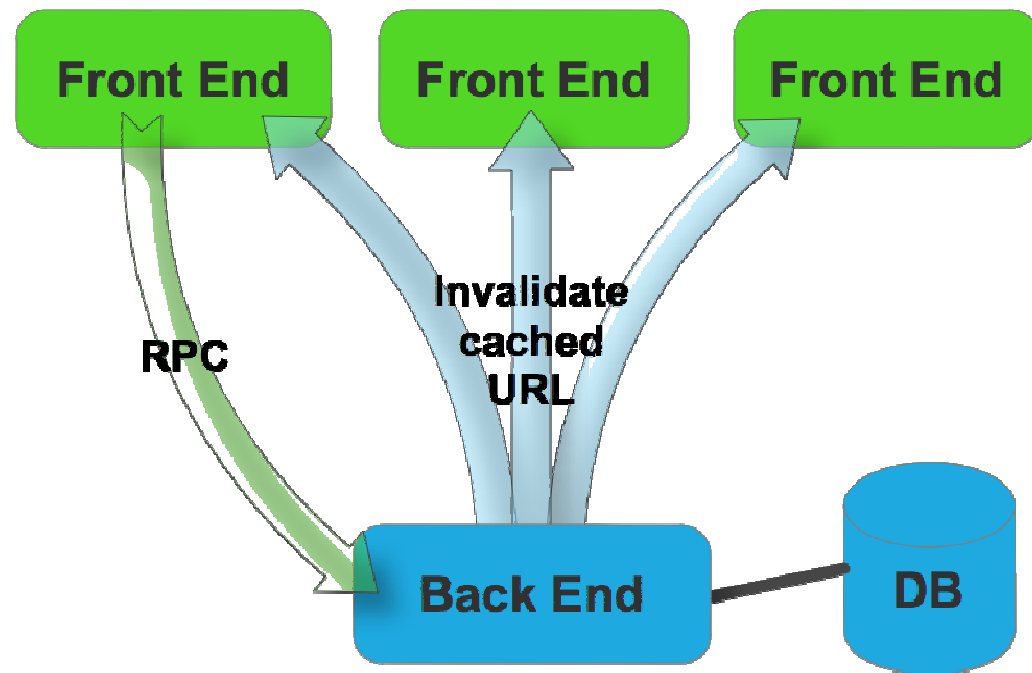
- Entries can be removed from cache using regular expressions
- There are some annotations to invalidate cache

```
?INVALIDATE(["^/blog/list"]).  
update_blog() ->  
    [update your database here...]  
  
    {template, "blog.html"}.
```

```
?INVALIDATE_GROUPS(["menus"]).  
update_menu() ->  
    [update your database here...]  
  
    {template, "blog.html"}.
```

Distribution

- Front End
 - *HTTP server*
 - *Dispatcher*
 - *Cache tables*
 - *Static content*
- Back End
 - *Invalidator*
 - *Controllers*
 - *Templates*
 - *Database*

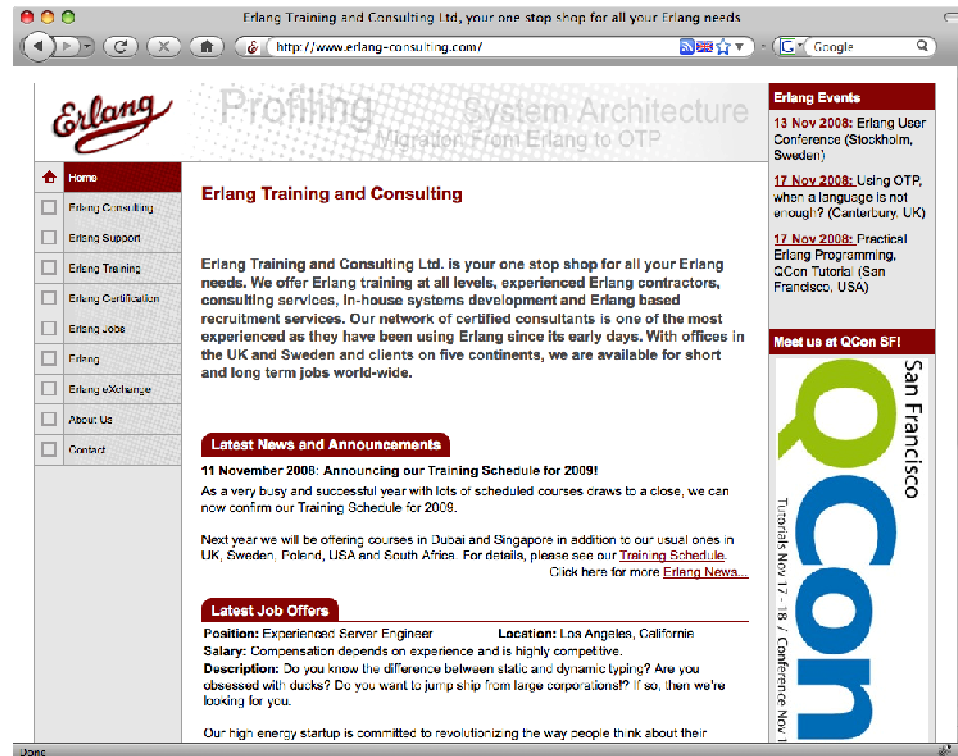


Plugins

- `bin/e_component.erl list` - lists all the e_components
- `bin/e_component.erl search Keyword`
- `bin/e_component.erl details Name`
- `bin/e_component.erl install Name`
- `bin/e_component.erl path Path install Name`
- Available at <http://ecomponents.erlang-web.org>

Example sites

- erlang-consulting.com



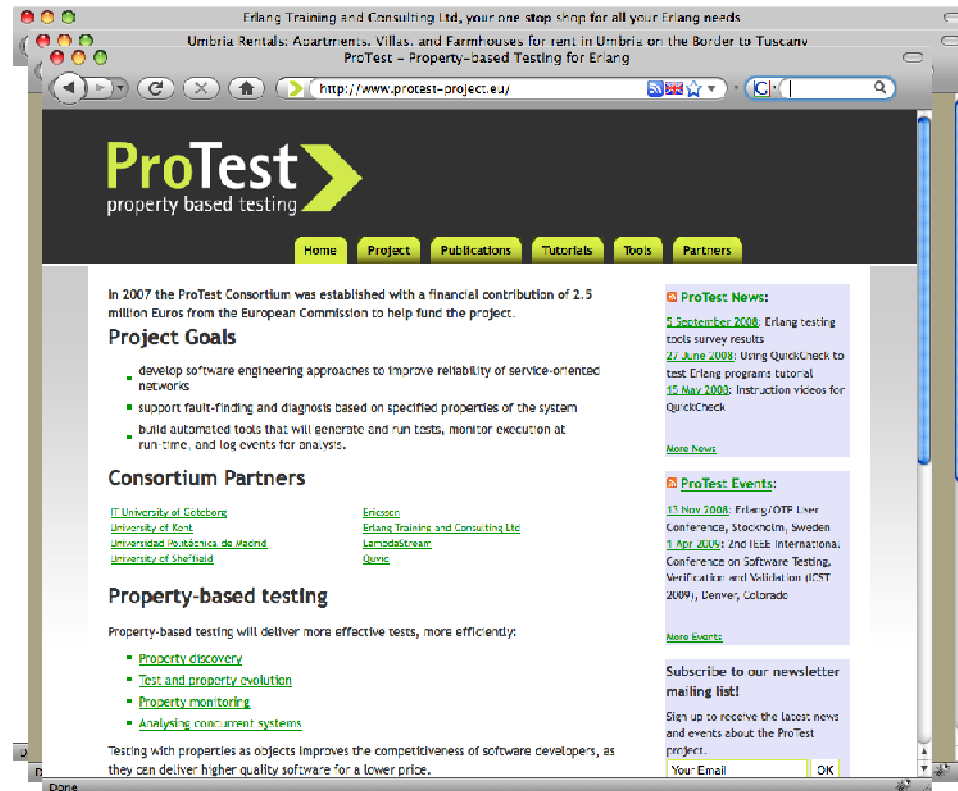
Example sites

- erlang-consulting.com
- umbria-rentals.com



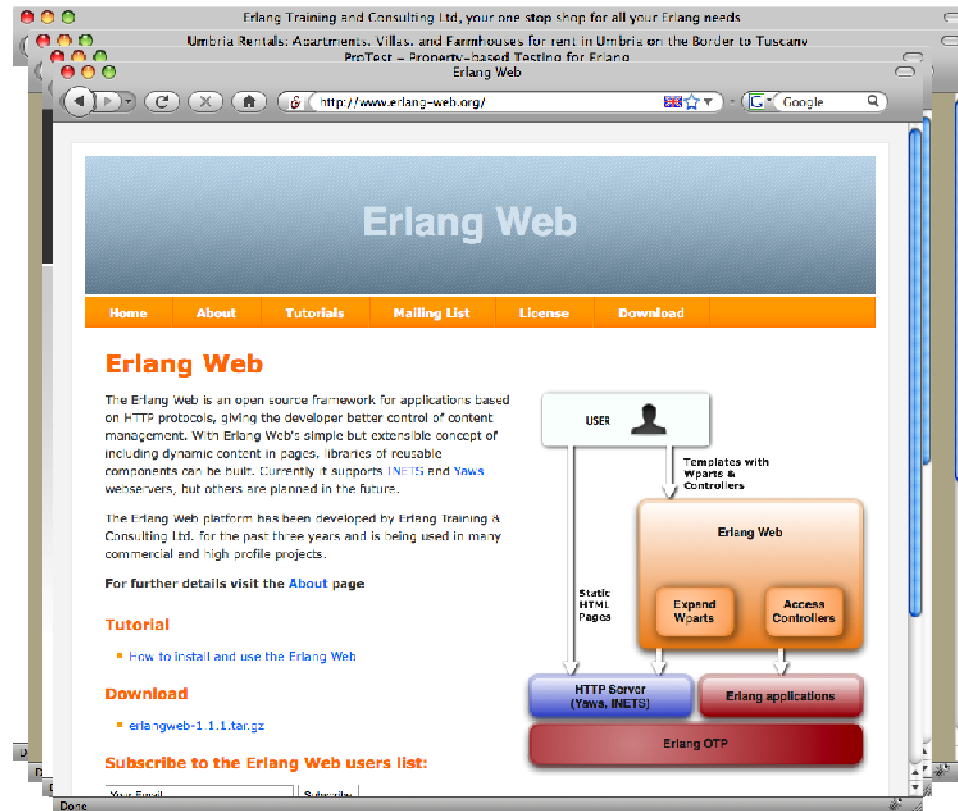
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- erlang-consulting.com
- umbria-rentals.com
- protest-project.eu



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Erlang Web Content Management System

- Standard CMS features like
 - *user management*
 - *menus and sections*
 - *pages and widgets*
 - *mailing list*
 - *blogs*
 - *database backup*
- Plugins based on Erlang Web components (e_components)

Erlang Web Content Management System

DEMO

Future Development

- Single instance of Erlang Web CMS handling many web sites
- Erlang Web tarballs prepaced with mochiweb, yaws, nitrogen
- Packages with Erlang Web for debian, ubuntu, MacOS, ?
- Adapting EWGI

Resources

- **Project page:**
<http://www.erlang-web.org>
- **Wiki:**
<http://wiki.erlang-web.org>
- **Sources (mercurial repository)**
<http://bitbucket.org/etc/erlang-web>

Questions



Thank You!

For more information and to download visit
<http://www.erlang-web.org>