

Admin Generator

It's RAD baby!

Admin Generator

It's RAD baby!

Rad

117 up, 88 down



Slang and/or abbreviation for the word "radical."

"Our trip to the strip club was rad!"

Rapid Application Development

Who am I, and what do I do?

- Ian P. Christian (aka. pookey)
- Coding PHP for about 8 years
- Work for VoIP.co.uk
- Involved with symfony and Doctrine
- My website: <http://pookey.co.uk>

About this presentation

- Based on sf1.0
- CRUD
- Admin Generator
- sfExtJsThemePlugin
- Questions and maybe some answers

Why Bother?!

Doing it yourself is easy!

The admin generator has a learning curve

The admin generator is slow

Reasons to use it

- Well documented
- Well Tested
- Reduced time to market
- Because it's cool!

Welcome to the Farm

- We have Farms
- A Farm can contain many Barns
- We have Animals
- A Barn can contain Many Animals
- Animals can by in many Barns

Assumptions

- You have sf1.0 or sf1.1 installed
- You have a project configured
- You have a 'backend' application
- You have configured your database.yml
- You're using Propel 1.2

CRUD: Lets make a farm!

```
1 propel :  
2   farm :  
3     id :  
4     name :      varchar(255)
```



```
emo htdocs # ./symfony propel-generate-crud backend farm Farm  
>> dir+      /var/www/www5.pookey.co.uk/htdo...ps/backend/modules/farm/actions  
>> file+     /var/www/www5.pookey.co.uk/htdo.../farm/actions/actions.class.php  
>> dir+      /var/www/www5.pookey.co.uk/htdo.../backend/modules/farm/templates
```


Show me the code!

```
15 class farmActions extends sfActions
16 {
17     public function executeIndex()
18     {
19         return $this->forward('farm', 'list');
20     }
21
22     public function executeList()
23     {
24         $this->farms = FarmPeer::doSelect(new Criteria());
25     }
26
27     public function executeShow()
28     {
29         $this->farm = FarmPeer::retrieveByPk($this->getRequestParameter('id'));
30         $this->forward404Unless($this->farm);
31     }
32
33     public function executeCreate()
34     {
35         $this->farm = new Farm();
36
37         $this->setTemplate('edit');
38     }
```

What about templates?

```
emo htdocs # ls apps/backend/modules/farm/templates/  
editSuccess.php listSuccess.php showSuccess.php
```

That's useless!

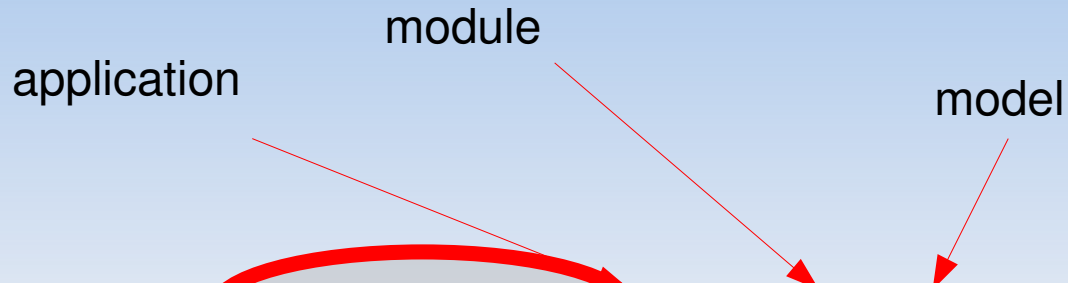


But... I can change my modelz?

Sorry Spoon Cat, no!
If you want that, you'll have to
keep listening!

A better CRUD

application module model



```
emo htdocs # ./symfony propel-init-crud backend farm Farm
>> dir+      /var/www/www5.pookey.co.uk/htdo...pps/backend/modules/farm/config
>> file+     /var/www/www5.pookey.co.uk/htdo...dules/farm/config/generator.yml
>> dir+      /var/www/www5.pookey.co.uk/htdocs/apps/backend/modules/farm/lib
>> dir+      /var/www/www5.pookey.co.uk/htdo...ps/backend/modules/farm/actions
>> file+     /var/www/www5.pookey.co.uk/htdo.../farm/actions/actions.class.php
>> dir+      /var/www/www5.pookey.co.uk/htdo.../backend/modules/farm/templates
>> dir+      /var/www/www5.pookey.co.uk/htdo...s/backend/modules/farm/validate
>> file+     /var/www/www5.pookey.co.uk/htdo...nal/backend/farmActionsTest.php
>> tokens    /var/www/www5.pookey.co.uk/htdo...nal/backend/farmActionsTest.php
>> tokens    /var/www/www5.pookey.co.uk/htdo...dules/farm/config/generator.yml
>> tokens    /var/www/www5.pookey.co.uk/htdo.../farm/actions/actions.class.php
```

The generated CRUD

List

farm	
Id	Name
1	This is Pookey's Farm

[create](#)

Edit/Create/Delete

Name:	<input type="text" value="This is Pookey's Farm"/>
<input type="button" value="save"/>	delete cancel

View

Id: 1
Name: This is Pookey's Farm
<hr/>
edit list

The generated CRUD action

```
1 <?php
2
3 /**
4  * farm actions.
5  *
6  * @package    farm
7  * @subpackage farm
8  * @author     Your name here
9  * @version    SVN: $Id: actions.class.php 2288 2006-10-02 15:22:13Z fabien $
10 */
11 class farmActions extends autofarmActions
12 {
13 }
```

WTF? Where's the code!!

The real code

cache/backend/prod/modules/autoFarm/actions/actions.class.php

```
1 <?php
2 // auto-generated by sfPropelCrud
3 // date: 2008/08/30 16:01:52
4 ?>
5 <?php
6
7 /**
8  * autoFarm actions.
9  *
10 * @package    ##PROJECT_NAME##
11 * @subpackage autoFarm
12 * @author     ##AUTHOR_NAME##
13 * @version    SVN: $Id: actions.class.php 3335 2007-01-23 16:19:56Z fabien $
14 */
15 class autoFarmActions extends sfActions
16 {
17     public function executeIndex()
18     {
19         return $this->forward('farm', 'list');
20     }
21 }
```

generator.yml

```
1 generator:  
2   class: sfPropelCrudGenerator  
3   param:  
4     model_class: Farm  
5     theme: default
```

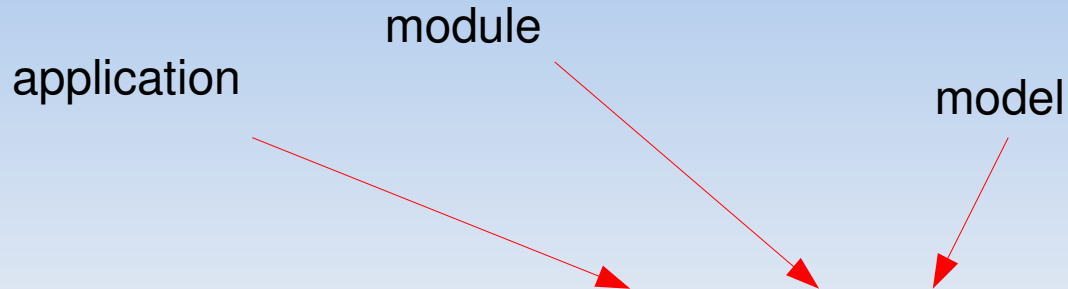
Wow, how cool!



Lolz, that's
cool!!

What else
can symphony
do to help me
work less?

init-admin



```
emo htdocs # ./symfony propel-init-admin backend animal Animal
>> dir+      /var/www/www5.pookey.co.uk/htdo...s/backend/modules/animal/config
>> file+     /var/www/www5.pookey.co.uk/htdo...les/animal/config/generator.yml
>> dir+      /var/www/www5.pookey.co.uk/htdo.../backend/modules/animal/actions
>> file+     /var/www/www5.pookey.co.uk/htdo...nimal/actions/actions.class.php
>> tokens    /var/www/www5.pookey.co.uk/htdo...les/animal/config/generator.yml
>> tokens    /var/www/www5.pookey.co.uk/htdo...nimal/actions/actions.class.php
```

The generated module


edit animal

Name:

Num legs:

Noise:


 list |  save |  save and add

 delete

animal list

Id	Name	Num legs	Noise
1	Cow	4	Moo

1 result

 create

generator.yml

- generator.yml is the heart of the admin generator
- Lots of options, too many to cover here

Command Line	Presentation	Fields
Options in this order: <APP> <MODULE> <OBJECT> \$ symfony propel-init-admin backend post Post \$ symfony propel-init-admin backend comment Comment	<pre>generator: class: sfPropelAdminGenerator param: model_class: post theme: mytheme ## custom theme css: admin/mystyle.css ## custom css</pre>	Parameters <pre>fields: my_field: name: ## field label/header help: ## tooltip, displays when requested type: ## for edit view only, see below credentials: ## classic App/Obj credentials array params: ## html options, depending on the tag</pre>
Generated code (can be overridden per module) accessible in cache/backup/<ENV>/modules/<MODULE>	Display (ordering and grouping) list view The equal sign (=) selects the field holding the hyperlink to the edit view <pre>list: ## tabular layout display: [=title, author_id, created_at] ## stacked layout layout: stacked display: [title, author_id, created_at] params: %%title%% by %%author%% (issued on %%created_at%%)</pre> Stacked layout uses display setting for the column headers (and sorting)	Cascade First declaration covers the whole module, can be specialized for each view <pre>fields: author: { name: author } list: fields: author: { help: this is the author of the comment } edit: fields: author: { name: author of the comment }</pre>
Actions <pre>create -> edit delete edit index -> list list save -> edit</pre> Methods <pre>public handleError() protected save->OBJECT() protected delete->OBJECT() protected update->OBJECT->FormRequest() protected get->OBJECT->OrCreate() protected process*Items() protected processSort() protected addFiltersCriteria() protected addSortCriteria()</pre>	Templates <pre>_edit_actions.php _edit_footer.php _edit_header.php _items.php _list_actions.php _list_footer.php _list_header.php _list_items.php _list_id_actions.php _list_id_stacked.php _list_id_tabular.php _list_id_tabular.php _list_id_stacked.php _list_id_tabular.php _list_id_stacked.php editSuccess.php listSuccess.php</pre>	Input types <pre>fields: my_field: type: plain ## no input input_tag ## default for text, numeric textarea_tag ## default for longvarchar input_date_tag ## default for date and timestamp select_tag ## default for foreign keys ## and for booleans checkbox_tag radioButton_tag admin_input_upload_tag</pre>
generator.yml <pre>generator: class: sfPropelAdminGenerator param: model_class: post theme: default fields: author_id: { name: post author } list: title: symfony blog posts display: [title, author_id, category_id] fields: published_on: { params: date_format-'dS/wS/yy' } layout: stacked params: %%is_published%%%%title%%
 by %%author%% in %%category%% (%%published_on%%)<op>%%content_summary%%</op> filters: [title, category_id, is_published] max_per_page: 2 edit: title: editing post "%%title%%" display: *post*: [title, category_id, content] *workflow*: [author_id, is_published, created_on] fields: category_id: { params: disabled=true } content: rich=true tinymce_options-height:150 author_id: { params: size=5 include_custom_choose_an_author } is_published: { credentials: [[admin, superadmin]] } created_on: { type: plain, params: date_format-'dS/wS' }</pre>	edit view <pre>edit: ## ungrouped display: [title, author_id, created_at] ## grouped display: *name*: [id] *group1*: [title, body] *group2*: [created_at]</pre> Groups with label "NONE" have no label	Usual params <pre>fields: my_field: params: disabled=true date_format='wS/dd/yy' ## for dates include_blank=true ## for select tags include_custom_choose_from_the_list size=45x5 ## for textareas rich=true tinymce_options-height:150</pre>
	Additional list settings Filters <pre>filters: - title ## text filter, accepts * as wildcard - author ## foreign_key filter, displays select - created_at ## date filter from... to... - is_admin ## boolean filter, yes/no/yes or no</pre> Pagination <pre>max_per_page: 10 ## maximum number of records per page</pre> Sorting <pre>sort: created_at ## sort column (ascending order by default) sort: [created_at, desc] ## desc sort order</pre>	Special fields Custom fields Fields not defined in the schemas.yml but for which a custom getter and/or setter were defined in the model. <pre>list: display: [nb_comments] modules/post/config/generator.yml fields: nb_comments: { name: number of comments }</pre> <pre>public function getnbComments() apps/lib/model/Post.php { return count(\$this->getComments()); }</pre>
Validation & Repopulation <pre>methods: post: app/backend/modules/post/validation/edit.yml - *post(title)* - *post(body)* names: post(title): required: yes required_msg: you must provide a title post(body): required: no validators: [antisiparvalidator, mystringvalidator] fillin: activate: on</pre>	Interactions Default actions <pre>list: object_actions: _edit: - _delete: - actions: _create: - edit: actions: _list: - _save: - _save_and_add: - _delete: -</pre> Parameters <pre>actions: my_action: name: Add a comment action: addcomment icon: backend/addcomment.png only_for: edit ## restrict to edit or create params: class=foobar confirm=Are you sure? credentials: [[admin, superuser], owner]</pre>	Partial fields Fields declared with a _prefx in the display key refer to a partial in the module's template dir. Use the name without prefix under the fields key. <pre>list: display: [_post_link] modules/comment/config/generator.yml fields: post_link: { name: related post }</pre> <pre><php echo link_to(modules/comment/templates/_post_link.php \$comment->gettrust()->getTitle(), 'post/edit?id='.\$comment->getPostId()) ></pre> Partials gain automatic access to the current object \$obj->obj.

Validation

```
1 fields:  
2   animal{name}:  
3     required:  
4       msg: Please name this animal.  
5
```

(yes, the vim highlighting of YAML isn't perfect!)

The error

edit animal

 The form is not valid because it contains some errors.

Name: Please name this animal.

Name:

↓ Please name this animal. ↓


Num legs:


2

Noise:

Cluck

 list

 save

 save and add

What does a cow look like?

- Add 'picture' to the schema.yml
- Regenerate the model
- We only need to change the generator.yml and add validation

Updated validation

```
1 fields:
2   animal{name}:
3     required:
4     msg: Please name this animal.
5   animal{picture}:
6     file: true
7     required:
8     msg: We need to know what this animal looks like.
9   sfFileValidator:
10    param:
11      mime_types:
12        - 'image/jpeg'
13        - 'image/png'
14        - 'image/x-png'
15        - 'image/pjpeg'
16      mime_types_error: Only PNG and JPEG images are allowed
17      max_size:         512000
18      max_size_error:  Max size is 512Kb
19
```

Updated generator.yml

```
1 generator:
2   class:          sfPropelAdminGenerator
3   param:
4     model_class:  Animal
5     theme:        default
6
7   edit:
8     fields:
9       picture:
10        name:      Animal Photo
11        help:      Max size - 512kb
12        type:      admin_input_file_tag
13        upload_dir: pictures/animals
14        params:    include_link=pictures/animals include_remove=true
15
```

What it looks like

edit animal

✔ Your modifications have been saved

Name:

Num legs:

Noise:

Animal Photo:

[\[show file\]](#) remove file


Max size - 512kb

Improving our list

animal list

Id	Name	Num legs	Noise	Picture
1	Cow	4	Moo	1c4e091235f15ef38856a7974bf6269b.jpg

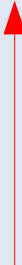
1 result

 create

Improving our list

apps/backend/modules/animal/config/generator.yml

```
1 generator:
2   class:      sfPropelAdminGenerator
3   param:
4     model_class:  Animal
5     theme:        default
6
7   list:
8     display:     [_picture, =name, num_legs, noise]
```




Improving our list


apps/backend/modules/animal/templates/_picture.php

```
1 <?php echo image_tag('/uploads/pictures/animals/' . $animal->getPicture()) ?>
```

The improved list

animal list

Picture	Name (asc)	Num legs	Noise
	Cat	4	Meow
	Cow	4	Moo
	Dog	4	Woof
	Duck	2	Quack
4 results			

 create

Relationships



Adding a Barn

```
1 propel :  
2   farm :  
3     id :  
4     name :      varchar(255)  
5   barn :  
6     id :  
7     farm_id :  
8     name :      varchar(16)
```

```
emo htdocs # ./symfony propel-init-admin backend barn Barn  
>> dir+      /var/www/www5.pookey.co.uk/htdo...pps/backend/modules/barn/config  
>> file+     /var/www/www5.pookey.co.uk/htdo...dules/barn/config/generator.yml  
>> dir+      /var/www/www5.pookey.co.uk/htdo...ps/backend/modules/barn/actions  
>> file+     /var/www/www5.pookey.co.uk/htdo.../barn/actions/actions.class.php  
>> tokens    /var/www/www5.pookey.co.uk/htdo...dules/barn/config/generator.yml  
>> tokens    /var/www/www5.pookey.co.uk/htdo.../barn/actions/actions.class.php
```

Adding a barn

edit barn

Farm:

Name:



list



save



save and add

What is '1'?!?

Improved Barn

```
10 class Farm extends BaseFarm
11 {
12     public function toString()
13     {
14         return $this->getName();
15     }
16 }
```

rn

Farm:	<input type="text" value="Pookey's Farm"/>
Name:	<input type="text"/>

[list](#) [save](#) [save and add](#)

Many-to-Many

```
1 generator:
2   class:          sfPropelAdminGenerator
3   param:
4     model_class:  Barn
5     theme:        default
6
7   edit:
8     display:
9       "Barn Details": [name, farm_id]
10      "Contents":     [animal_barn]
11
12   fields:
13     animal_barn:  { type: admin_double_list, params: through_class=AnimalBarn }
```

```
5   barn:
6     id:
7     farm_id:
8     name:      varchar(16)
9   animal:
10    id:
11    name:      varchar(64)
12    num_legs:  integer
13    noise:     varchar(16)
14    picture:   varchar(255)
15  animal_barn:
16    barn_id:
17    animal_id:
```

Many-to-many

edit barn

Barn Details

Name:

Farm:

Contents

Animal barn:


Unassociated

Cow
Dog

Associated

Duck
Cat

 list |  save |  save and add

 delete

Improving our Animal Form

apps/backend/modules/animal/config/generator.yml

```
1 generator:
2   class:      sfPropelAdminGenerator
3   param:
4     model_class:  Animal
5     theme:        default
6     edit:
7       display:
8         - name
9         - _legs
10        - noise
11        - picture
```

apps/backend/modules/animal/templates/_legs.php.html

```
1 <?php echo select_tag('legs', options_for_select(array(
2   2 => '2 Legs (bad)',
3   4 => '4 Legs (good)',
4   ), $animal->getNumLegs())); ?>
```

Improving our Animal Form

apps/backend/modules/animal/actions/actions.class.php

```
11 class animalActions extends autoanimalActions
12 {
13     protected function updateAnimalFromRequest()
14     {
15         $legs = $this->getRequest()->getParameter('legs');
16         if ($legs)
17         {
18             $this->animal->setNumLegs($legs);
19         }
20         parent::updateAnimalFromRequest();
21     }
22 }
```

Improving our Animal Form

edit animal

✔ Your modifications have been saved

Name:

Legs:

Noise:

Animal Photo:


[\[show file\]](#) remove file
Max size - 512kb

Filtering


```
1 generator:
2   class:          sfPropelAdminGenerator
3   param:
4     model_class:  Animal
5     theme:        default
6
7   list:
8     display:      [_picture, =name, num_legs, noise]
9     filters:      [name, noise]
```

Filtering

animal list

Picture	Name (asc)	Num legs	Noise
	Cow	4	Moo


1 result

 create

filters

Name:

Noise:

 reset

 filter

Advanced Filtering

apps/backend/modules/animal/config/generator.yml


```
1 generator:  
2   class:      sfPropelAdminGenerator  
3   param:  
4     model_class:  Animal  
5     theme:        default  
6  
7   list:  
8     display:      [_picture, =name, num_legs, noise]  
9     filters:      [name, noise, num_legs]
```

apps/backend/modules/animal/templates/_num_legs.php


```
1 <?php  
2   echo select_tag('filters[num_legs]', options_for_select(array(  
3     '' => '', // no filtering  
4     2 => '2 Legs (bad)',  
5     4 => '4 Legs (good)',  
6   ), isset($filters['num_legs']) ? $filters['num_legs'] : '' ));  
7 ?>
```

Advanced Filtering

animal list

Picture	Name (asc)	Num legs	Noise
	Cat	4	Meow
	Cow	4	Moo
	Dog	4	Woof

3 results


 create


filters

Name:

Noise:

Num legs:

4 Legs (good) 

 reset

 filter

Adding Animals to the Barn List

```
1 generator:  
2   class:      sfPropelAdminGenerator  
3   param:  
4     model_class:  Barn  
5     theme:        default  
6  
7   list:  
8     display:      [=name, _animals]
```

```
1 <?php  
2   $animals = array();  
3   foreach ( $barn->getAnimalBarns() as $link )  
4   {  
5     $animals[] = $link->getAnimal()->toString();  
6   }  
7   echo implode($animals, ',');  
8 ?>
```

Sf 1.0.17 | vars & config | logs & msgs | 5 | 73

- Farms
- Barns
- Animals

barn list

Name	Animals
A Pink Barn	Cow,Duck

1 result

[+](#) create

Specifying a Peer Method

```
1 generator:  
2   class:          sfPropelAdminGenerator  
3   param:  
4     model_class:  Barn  
5     theme:        default  
6  
7     list:  
8       display:    [=name, _animals]  
9       peer_method: doSelectJoinAnimalBarnAndAnimal
```



What else can it do?

- Integration with credentials
- I18N is possible
- Rich text editor
- Rich date editor

sfExtJsThemePlugin

- Contains: Generator + Theme
- View (*js*) requests data (*json*) at the user
- More interactive user interface
- Designed to create web-applications
- Capable of:
 - Lazy loads views (edit/list/filter-panels)
 - Packing and minifying automatically

The Future!

- New Form API – easier to extend
- Propel & Doctrine support
- Themable
- I18N
- Better upload
- <http://trac.symfony-project.org/wiki/SprintSymfony12AdminGenerator>

Questions?

- Thanks to...some people....