
Apache Zeta Components

OSI Days 2011

Tobias Schlitt (@tobySen)

November 21, 2011

About me

- ▶ Degree in computer science
- ▶ Prof. PHP since 1999
- ▶ Open source enthusiast
- ▶ FLOSS contributor



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<http://qafoo.com>

What to expect

- ▶ The project & people
- ▶ Current state & history
- ▶ Components & specialties
- ▶ Useful code & examples
- ▶ Interaction & discussion

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- ▶ Current state & history
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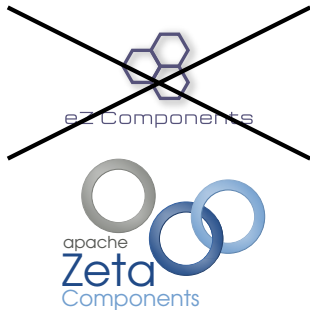
Shaked well . . .

eZ Components



eZ Components

Apache Zeta Components



Objectives

- ▶ High quality code
- ▶ Well thought out API
- ▶ Backwards compatibility
- ▶ Extensive documentation

Component overview

- ▶ Archive
- ▶ Authentication
- ▶ Base
- ▶ Cache
- ▶ Configuration
- ▶ ConsoleTools
- ▶ Database
- ▶ DatabaseSchema
- ▶ Debug
- ▶ Document
- ▶ EventLog
- ▶ Execution
- ▶ Feed
- ▶ Graph
- ▶ ImageAnalysis
- ▶ ImageConversion
- ▶ Mail
- ▶ MvcTools
- ▶ PersistentObject
- ▶ Reflection
- ▶ Search
- ▶ SignalSlot
- ▶ SystemInformation
- ▶ Template
- ▶ Translation
- ▶ Tree
- ▶ Url
- ▶ UserInput
- ▶ Webdav
- ▶ Workflow

Component overview

The Base component

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General purpose components

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Component overview

Web related components

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Component overview

Database related components

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Component overview

Image related components

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Component overview

Special components

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Component overview

Components covered in this session

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Dependencies

- ▶ Highly discouraged
- ▶ However, some exist ...
 - ▶ Everything depends on Base
 - ▶ PersistenObject and DatabaseSchema depend on Database
 - ▶ ImageConversion depends on ImageAnalysis
- ▶ Usage of *Tie-Ins*

Tie-Ins

Template

Translation

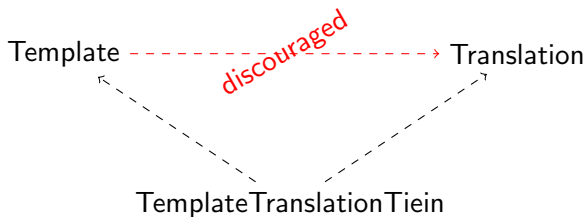
Tie-Ins

Template -----> Translation

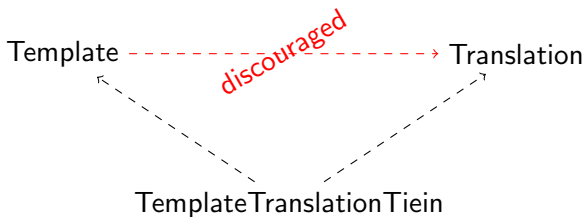
Tie-Ins

Template  Translation

Tie-Ins



Tie-Ins



- ▶ No dependent classes in components
- ▶ All dependencies realized in Tie-Ins
- ▶ Tieins depend on both tied-in packages

Statistics

- ▶ 46 components

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 - ▶ 344,077 non-test LOC
 - ▶ 190,240 CLOC

The Graph component

The Zeta Graph component

```
1  require_once 'Base/src/ezc_bootstrap.php';
2
3  $graph = new ezcGraphPieChart();
4  $graph->palette = new ezcGraphPaletteEzRed();
5  $graph->title = 'Access_statistics';
6  $graph->options->label = '%2$d_(%3$.1f%)';
7
8  $graph->data['Access_statistics'] = new ezcGraphArrayDataSet( array(
9      'Mozilla' => 19113,
10     'Explorer' => 10917,
11     'Opera' => 1464,
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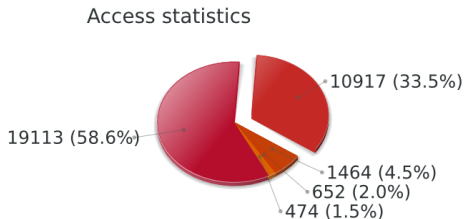
The Zeta Graph component

```
1 $graph->renderer = new ezcGraphRenderer3d ();
2
3 $graph->renderer->options->dataBorder = 0.;
4 $graph->renderer->options->moveOut = .2;
5
6 $graph->renderer->options->pieChartOffset = 63;
7
8 $graph->renderer->options->pieChartGleam = .3;
9 $graph->renderer->options->pieChartGleamColor = '#FFFFFF';
10
11 // ...
12 $graph->render( 800, 300, 'pie_chart_3d.svg' );
```

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The Zeta Graph component



Back to the topic ...

History ...

History: eZ Components

- ▶ Developed since 2004 by eZ Systems AS
 - ▶ Makers of enterprise OSS CMS eZ Publish
 - ▶ <http://ez.no>
- ▶ Initial goal
 - ▶ Refactor and cleanup core libs of eZ Publish
 - ▶ Pull out standalone, general purpose library

History: The break

March 2010

- ▶ All eZ Components developers left eZ Systems

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 - ▶ put voluntary efforts into the project
 - ▶ push it further
 - ▶ ensure it is not broken

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 - ▶ Spin off the project to become independent
 - ▶ Look for or create a foundation

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- ▶ Discussion with eZ Systems
 - ▶ Spin off the project to become independent
 - ▶ Look for or create a foundation
- ▶ Result: Proposed code to Apache Software Foundation



- ▶ <http://apache.org>
- ▶ Well known OSS foundation
- ▶ Home of OSS projects like
 - ▶ Apache HTTP server
 - ▶ Subversion
 - ▶ CouchDB

Incubation

- ▶ Before becoming an Apache project
- ▶ Goals:
 - ▶ Adjust to the ASF principles
 - ▶ Gather stable community
 - ▶ Sort out legal issues
 - ▶ Setup infrastructure

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- ▶ Before becoming an Apache project
- ▶ Goals:
 - ▶ Adjust to the ASF principles
 - ▶ Gather stable community
 - ▶ Sort out legal issues
 - ▶ Setup infrastructure
- ▶ Entered incubation on 2010-05-21
- ▶ Duration of incubation phase unknown

The ASF way

- ▶ Meritocracy
 - ▶ Power through contribution
 - ▶ Project management comitee (PMC)

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 - ▶ Public mailinglists
 - ▶ Decisions by votes
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The ASF way

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- ▶ Transparency
 - ▶ Public mailinglists
 - ▶ Decisions by votes
 - ▶ Involve the community
- ▶ Legal stuff
 - ▶ Apache License
 - ▶ CLAs

The Mail component

Sending mail

```
1 $mail = new ezcMail();
2
3 $mail->from = new ezcMailAddress( 'sender@example.com', 'Bernard_Bernoulli' );
4 $mail->addTo( new ezcMailAddress( 'receiver@example.com', 'Wendy' ) );
5 $mail->subject = "This_is_the_subject_of_the_example_mail";
6
7 $textPart = new ezcMailText( "This_is_the_body_of_the_example_mail." );
8
9 $fileAttachment = new ezcMailFile( "~/myfile.jpg" );
10
11 $mail->body = new ezcMailMultipartMixed( $textPart, $fileAttachment );
12
13 $transport = new ezcMailMtaTransport();
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15 $transport->send( $mail );
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Retrieving mail

```
1 $imap = new ezcMailmapTransport( "imap.example.com" );
2
3 $imap->authenticate( "user", "password" );
4 $imap->selectMailbox( 'Inbox' );
5
6 $imap->delete( 1 );
7 $imap->expunge();
8
9 $imap->noop();
10
11 $set = $imap->fetchByFlag( "DELETED" );
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13 $parser = new ezcMailParser();
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Back to the topic ...

Project state ...

Everything new ...

- ▶ ... website
 - ▶ <http://incubator.apache.org/zetacomponents/>
 - ▶ (<http://zetacomponents.org>)
- ▶ ... SVN
 - ▶ <http://svn.apache.org/repos/asf/incubator/zetacomponents>
- ▶ ... mailinglists
 - ▶ Developers: zeta-dev@incubator.apache.org
 - ▶ Users: zeta-users@incubator.apache.org
 - ▶ Commits: zeta-commits@incubator.apache.org
- ▶ ... issue tracker
 - ▶ <https://issues.apache.org/jira/browse/ZETACOMP>
 - ▶ (<http://s.apache.org/zeta-issues>)

Everything new ...

<http://zetacomponents.org>

Current state

- ▶ In the works ...
 - ▶ First release

Current state

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 - ▶ First release
- ▶ Contributions to be incorporated
 - ▶ Configuration override
 - ▶ Profiler for Database
 - ▶ Geolocation component (Midgard)
 - ▶ CouchDB backend for Workflow
 - ▶ Real ODT support for Document

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 - ▶ CouchDB backend for Workflow
 - ▶ Real ODT support for Document
- ▶ New prominent users / contributors
 - ▶ Typo 3 Association
 - ▶ Midgard CMS

Participate

- ▶ We need you!
- ▶ Getting involved:
 - ▶ Join the developer mainlinglist
 - ▶ Help fixing bugs
 - ▶ Check and write docs
 - ▶ Propose features / components

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 - ▶ Propose features / components
- ▶ Our goals:
 - ▶ High quality PHP 5 code
 - ▶ Backwards compatibility
 - ▶ Generality / flexibility

Are there any questions left?

Thanks for listening

Slides will be online at
<http://talks.qafoo.com>

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Stay in touch

- ▶ Tobias Schlitt
- ▶ toby@qafoo.com
- ▶ @tobySen / @qafoo

Rent a PHP quality expert:
<http://qafoo.com>