

# eZ components

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RAD for PHP

php|symphony webcast

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<http://files.derickrethans.nl/ezc-webcast.pdf>

# Library Goals

- Provide a solid platform for PHP application development
- Clean and simple API
- Keep backward compatibility for longer periods of time
- Stable and few regressions
- Clean IP, Open Source friendly

# Autoload Arrays

Using the classname's part as path elements makes ugly paths:

ezcMailTransportMta	=> mail/transport/mta.php
ezcMailTransportSmtp	=> mail/transport/smtp.php
ezcMailException	=> mail/exception.php
ezcMailTransportSmtpException	=> mail/transport/smtp/exception.php

More logical names (`mail_autoload.php`):

ezcMailTransportMta	=> transports/transport_mta.php
ezcMailTransportSmtp	=> transports/transport_smtp.php
ezcMailException	=> exceptions/mail_exception.php
ezcMailTransportSmtpException	=> exceptions/transport_smtp_exception.php

Some problems:

- Clashes in first part of the classname
- Needs installation into correct place for development

# Documentation

Documentation:

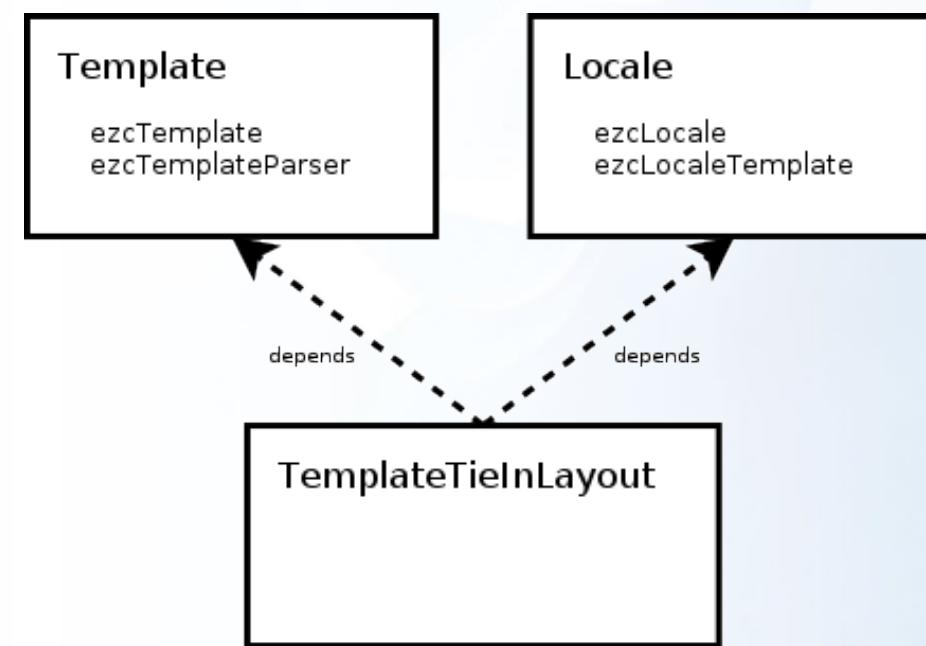
- Makes a library usable
- API documentation
- Examples
- Tutorials

PHP Documentor:

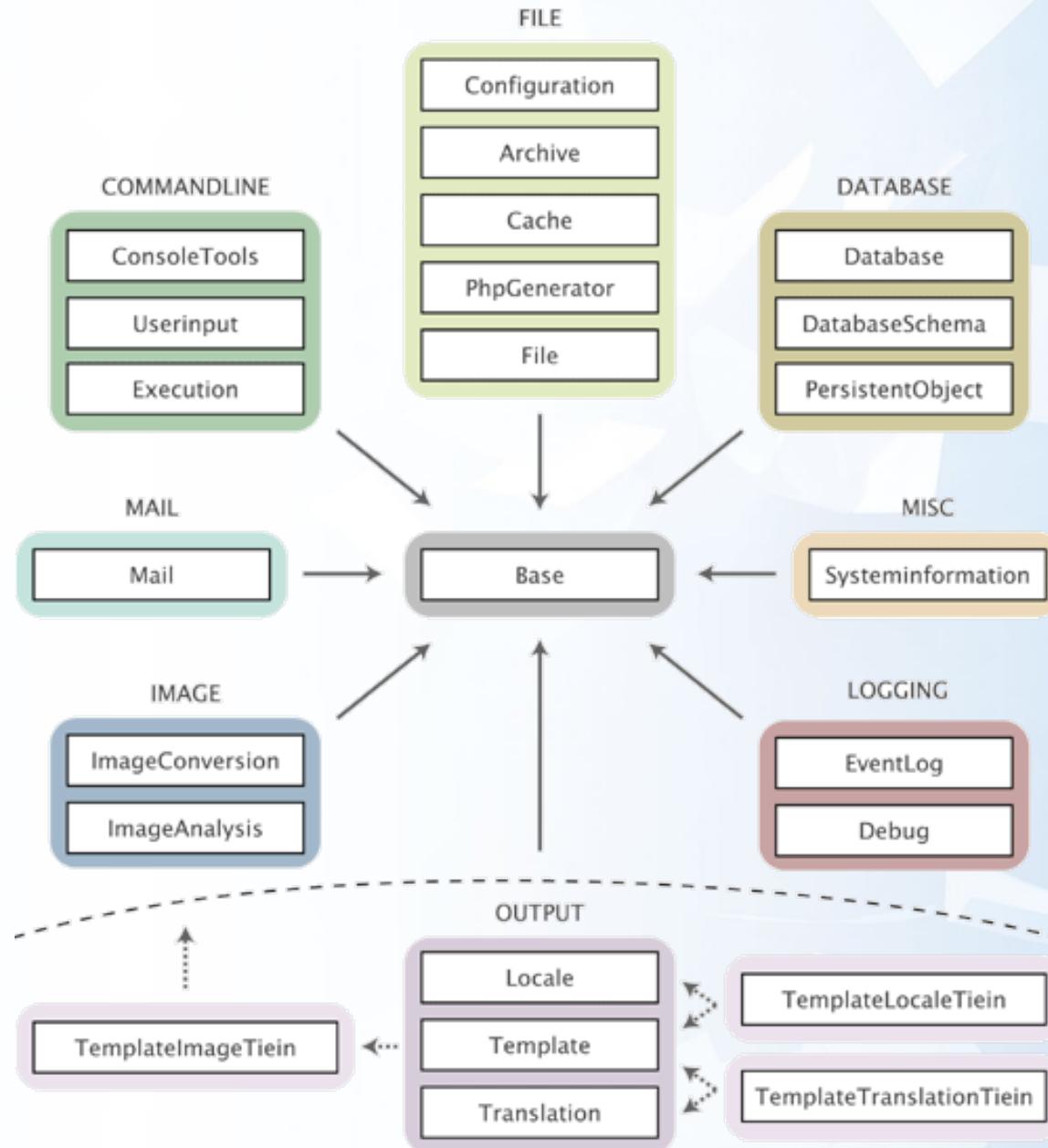
- Made for PHP
- In use by PEAR
- Supported by PHP IDEs

# Dependencies

- The less the better
- Only if really necessary
- Dependency-only packages
- Tie-Ins



# Overview



# Installation and Setup

## Installation:

```
wget http://ez.no/downloads/ezcomponents-1.0.tar.bz2  
tar -xjf ezcomponents-1.0.tar.bz2  
pwd
```

## Setup:

```
<?php  
ini_set( 'include_path', '/tmp/ezcomponents-1.0::' );  
require 'Base/src/base.php';  
  
function __autoload( $className )  
{  
    ezcBase::autoload( $className );  
}  
  
ezcBase::checkDependency( 'Test', ezcBase::DEP_PHP_VERSION, '5.1.3' );  
?>
```

# Installation and Setup

## Installation:

```
pear channel-discover components.ez.no  
pear remote-list -c ezc  
pear install ezc/ezcomponents
```

## Setup:

```
<?php  
require 'ezc/Base/base.php';  
  
function __autoload( $className )  
{  
    ezcBase::autoload( $className );  
}  
  
ezcBase::checkDependency( 'Test', ezcBase::DEP_PHP_VERSION, '5.1.3' );  
?>
```

# Configuration

```
<?php  
require 'ezc-setup.php';  
  
$cfg = ezcConfigurationManager::getInstance();  
$cfg->init( 'ezcConfigurationIniReader', dirname( __FILE__ ) . '/cfg' );  
  
$pw = $cfg->getSetting( 'example', 'db', 'password' );  
echo "The password is '$pw'.\n";  
?>
```

# Archive

```
<?php
require 'ezc-setup.php';

$archive = ezcArchive::open( dirname( __FILE__ ) . '/test-archive.zip' );
foreach( $archive as $entry )
{
    if ( $entry->getPath() == 'archive-logo.jpg' )
    {
        $dir = dirname( __FILE__ );
        echo "Extracting {$entry->getPath()} to $dir.<br/><br/>\n";
        $archive->extractCurrent( $dir );
    }

    echo $entry, "\n";
}
?>
```



# Cache

```
<?php
require 'ezc-setup.php'; @mkdir( '/tmp/temp-location' );

ezcCacheManager::createCache(
    'identifier', '/tmp/temp-location',
    'ezcCacheStorageFileEvalArray', array( 'ttl' => 30 ) );
$cache = ezcCacheManager::getCache( 'identifier' );
$myId = 'unique_id_1';

if ( ( $data = $cache->restore( $myId ) ) === false )
{
    $data = "Plain cache stored on " . date( 'Y-m-d, H:i:s' );
    $cache->store( $myId, $data );
}
echo $data;
```

- **FilePlain:** Raw data
- **FileArray:** var\_export() data, include to restore
- **FileEvalArray:** var\_export() data, eval() to restore

# ConsoleTools

```
<?php
require 'ezc-setup.php';
$optionHandler = new ezcConsoleInput();

$file = new ezcConsoleOption(
    'f', 'file', ezcConsoleInput::TYPE_STRING
);
$file->mandatory = true;
$optionHandler->registerOption( $file );

try
{
    $optionHandler->process();
}
catch ( ezcConsoleException $e )
{
    die( $e->getMessage() );
}

echo "Processing file: ",
    $optionHandler->getOption( 'f' )->value, "\n";
?>
```

```
<?php
require 'ezc-setup.php';
$out = new ezcConsoleOutput;
$out->formats->headline->color = 'red';
$out->formats->headline->style = array( 'bold' );

$table = new ezcConsoleTable( $out, 60 );
$table[0]->format = 'headline';
$table[0]->borderFormat = 'headline';

$table[0][0]->content = 'Headline 1';
$table[0][1]->content = 'Headline 2';
$table[1][0]->content = "The next cell will wrap:";



| Headline 1               | Headline 2                                                                                        |
|--------------------------|---------------------------------------------------------------------------------------------------|
| The next cell will wrap: | If there is a lot of text in a specific cell then the ezcConsoleTable will correctly wrap around. |


```

```
END;
$table[1][1]->align = ezcConsoleTable::ALIGN_RIGHT;
```

```
$table->outputTable();
?>
```

Headline 1	Headline 2
The next cell will wrap:	If there is a lot of text in a specific cell then the ezcConsoleTable will correctly wrap around.

# UserInput

```
<?php
require 'ezc-setup.php';
if ( ezcInputForm::hasGetData() )
{
    $definition = array(
        'test' => new ezcInputFormDefinitionElement(
            ezcInputFormDefinitionElement::REQUIRED, 'int' ),
        'test2' => new ezcInputFormDefinitionElement(
            ezcInputFormDefinitionElement::REQUIRED, 'number_int' ),
    );
}

try
{
    $form = new ezcInputForm( INPUT_GET, $definition );
    echo $form->test, "\n";
    echo $form->test2, "\n";
}
catch ( ezcInputFormException $e )
{
    die( $e->getMessage() );
}
?>
```

## Supported Handlers:

- MySQL
- PostGreSQL
- Oracle
- SQLite

## Using Instances:

```
<?php  
require 'ezc-setup.php';  
  
$db1 = ezcDbFactory::create( 'mysql://root@localhost/ezc' );  
ezcDbInstance::set( $db1, 'ezc' );  
  
$trunk = ezcDbFactory::create( 'mysql://root@localhost/eztrunk' );  
ezcDbInstance::set( $trunk, 'ezt' );  
  
$db = ezcDbInstance::get( 'ezt' );  
echo $db->getName();  
?>
```

# Database

```
<?php
require 'ezc-setup.php';
$db = ezcDbFactory::create( 'mysql://root@localhost/geolocation' );
$sq = $db->createSelectQuery();

$stmt = $sq->select( 'name', 'country', 'lat', 'lon' )
    ->from( 'city' )
    ->where(
        $sq->expr->like(
            'normalized_name', $sq->bindValue( 'oslo%' )
        )
    )
    ->orderBy( 'country', 'name' )
    ->prepare();
$stmt->execute();

foreach ( $stmt as $entry )
{
    list( $name, $country, $lat, $lon ) = $entry;
    printf( '%s, %s is @ %.2f%s %.2f%s<br/>',
        $name, $country,
        abs( $lat ), ( $lat > 0 ? "N" :"S" ),
        abs( $lon ), ( $lon > 0 ? "E" : "W" ) );
}
?>
```

# Persistent Object

```
<?php
require 'ezc-setup.php';
$session = new ezcPersistentSession(
    ezcDbInstance::get(),
    new ezcPersistentCodeManager( "path/to/definitions" )
);

// Creating New Objects
$object = new City();
$object->normalized_name = "dieren";
$object->name = 'Dieren';
$object->country = 'NL';
$session->save( $object );

// Finding Objects
$q = $session->createFindQuery( 'City' );
$q->where(
    $sq->expr->like( 'name', $sq->bindValue( 'oslo%' ) )
)
->orderBy( 'country', 'name' )
->limit( 10 );
$objects = $session->findIterator( $q, 'City' );

foreach ( $objects as $object )
{
    // ...
}
?>
```

```
<?php
require 'ezc-setup.php';
$log = ezcLog::getInstance();
$log->source = $log->category = NULL;
// Create writers
$warningWriter = new ezcLogUnixFileWriter(
    "/tmp", "ezc-pres-warning.log", 128
);
$errorWriter = new ezcLogUnixFileWriter(
    "/tmp", "ezc-pres-error.log", 256
);
// Create filters
$warningFilter = new ezcLogFilter;
$warningFilter->severity = ezcLog::WARNING;
$errorFilter = new ezcLogFilter;
$errorFilter->severity = ezcLog::ERROR;
$log->getmapper()->appendRule(
    new ezcLogFilterRule( $warningFilter, $warningWriter, true )
);
$log->getmapper()->appendRule(
    new ezcLogFilterRule( $errorFilter, $errorWriter, true )
);

// Log messages
$log->log( "Oops, this was unexpected.", ezcLog::WARNING );
$log->log( "Oh no, major problem!", ezcLog::ERROR, array(
    "category" => "SQL"
) );
```

```
<?php
require 'ezc-setup.php';
$dir = dirname( __FILE__ );
$mail = new ezcMailComposer();

$mail->from = new ezcMailAddress( 'john@doe.com', 'John Doe' );
$mail->addTo( new ezcMailAddress( 'dr@ez.no', 'Derick Rethans' ) );

$mail->subject = "Example of an HTML email with attachments";
$mail->plainText = "Here is the text version of the mail.
This is displayed if the client can not understand HTML";
$mail->htmlText = <<<ENDHTML
<html>
Here is the HTML version of your mail
with an image: <img src='file:///$dir/consoletools-table.png' />
</html>
ENDHTML;

$mail->addAttachment( "$dir/mail.php" );
$mail->build();

echo "<pre><font size='5'>",
      htmlspecialchars(
          $mail->generateHeaders() . $mail->generateBody() );
?>

$transport = new ezcMailTransportSmtp( 'localhost', null, null, 2525 );
// $transport->send( $mail );
?>
```

```
<?php
require 'ezc-setup.php';
$dir = dirname( __FILE__ );
// Setup
$filters = array();
$settings = new ezcImageConverterSettings(
array( new ezcImageHandlerSettings( 'GD', 'ezcImageGdHandler' ) )
);
$converter = new ezcImageConverter( $settings );

// Create transformations
$filters[] = new ezcImageFilter( 'scale',
array(
    'width' => 320, 'height' => 240,
    'direction' => ezcImageGeometryFilters::SCALE_DOWN,
)
);
$converter->createTransformation(
'preview', $filters, array( 'image/jpeg' )
);

$filters[] = new ezcImageFilter( 'colorspace',
array( 'space' => ezcImageColorspaceFilters::COLORSPACE_GREY )
);
$converter->createTransformation(
'prevgrey', $filters, array( 'image/jpeg' )
);
?>
```

# ImageConversion

```
<?php  
require 'imageconversion.php';  
  
// Apply transformations  
$converter->transform(  
    'preview', "$dir/nacreous.jpg", "$dir/nacreous-small.jpg"  
);  
$converter->transform(  
    'prevgrey', "$dir/nacreous.jpg", "$dir/nacreous-grey.jpg"  
);  
?>
```

## Result:



# What's Next?

New components:

- DatabaseSchema: DDL manipulation
- Feed: RSS/ATOM feeds
- Mail: Parsing mail, support for encryption
- PersistentObject: Integration with Database Schema
- SignalObserver: IPC framework to send signals between objects
- Template: Template, with compiling, optimization

# Questions and Resources

Questions anybody?

Resources:

- Download: [http://ez.no/download/ez\\_components](http://ez.no/download/ez_components)
- Documentation: <http://ez.no/doc/components/overview>
- Mailinglist: <http://lists.ez.no/mailman/listinfo/components>