


Development Process and Tools at AIT

description of Scrum and the IDE

BHL
Biodiversity Heritage Library
EUROPE

 co-funded by the
Community programme
eContentplus



August 2009

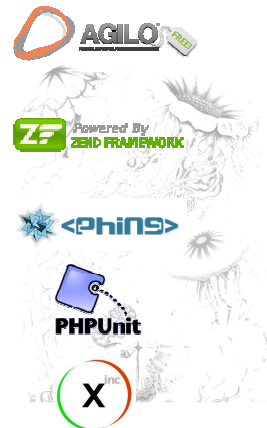
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Overview

- Process: Scrum with Agilo
 - <http://www.scrumalliance.org/>
 - <http://www.agile42.com/cms/pages/agilo/>
- Code base: Zend Framework
 - <http://framework.zend.com/>
- Builds: phing
 - <http://phing.info/trac/>
- Tests: phpUnit
 - <http://www.phpunit.de/>
- CI Server: Xinc
 - <http://code.google.com/p/xinc/>



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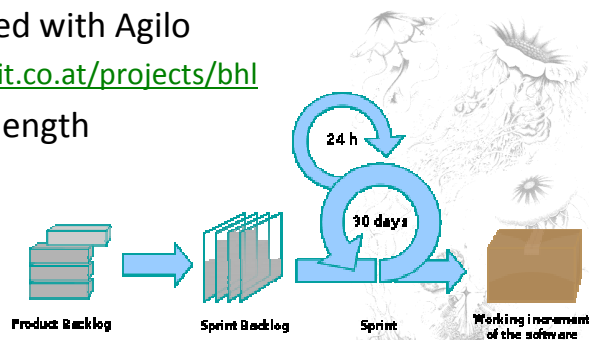
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Scrum



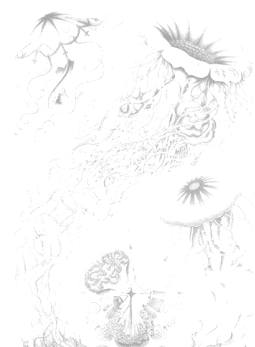
- Agile Software Development
- Process Managed with Agilo
 - <http://scrum.ait.co.at/projects/bhl>
- 2 weeks Sprint length



BHL-OAIS extends Zend Framework



- Extreme Simplicity & Productivity
 - extensible
 - MVC
- Latest Web Development Features
 - Web Services
 - High-quality, object-oriented PHP 5 class library
- Friendly & Simple Licensing, Safe for the Enterprise
 - Based on BSD
 - CLA based on open-source Apache license
- Fully Tested – Extend Safely and Easily
 - has been unit-tested from the start
 - with stringent code coverage requirements



Build processes



- phing is ant for php
- targets for
 - library setup/updates
 - api documentation
 - unit tests
 - code coverage

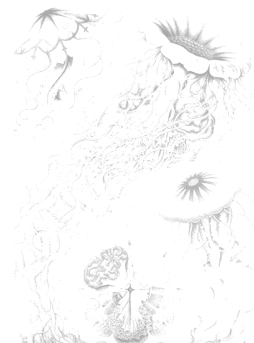
```

total time: 3.0199 seconds
it015@it015:/var/www/bhl$ phing phunit
buildfile: /var/www/bhl/build.xml
[property] Loading /var/www/bhl/./build.properties
IT_OAIS > clean-phpunit:
[delete] Deleting directory /var/www/bhl/phpunit
[delete] Deleting directory /var/www/bhl/codecoverage
IT_OAIS > phunit:
[mkdir] Created dir: /var/www/bhl/phpunit
[mkdir] Created dir: /var/www/bhl/codecoverage
coverage-setup] Setting up coverage database for 4 files
[echo] phpunit report available at phpunit directory
coverage-report] Transforming coverage report
[echo] code coverage report available at phpunit directory
BUILD FINISHED
total time: 1.2802 second
it015@it015:/var/www/bhl$
  
```

Unit Tests with phpUnit



- Unit tests for
 - all library classes
 - all Zend_Controller classes
- desired target
 - Test Driven Development
 - team is currently trained on that



Combine tools with Xinc

- Continuous Integration Server for PHP5
 - <http://ait110:8989/>
- automated svn updates
- automated builds
- reports on
 - phpUnit <http://ait110/phpunit>
 - code coverage <http://ait110/codecoverage>
 - phpdoc <http://ait110/phpdoc>

