Ruby.PHP

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Ruby.PHP = Ruby to PHP compiler

Why Compile Ruby to PHP?

- Hosting
- Master thesis topic
- Great way how to learn Ruby inside out :-)

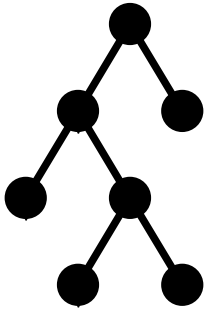
How Is It Done?

Ruby code

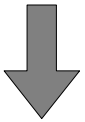
```
def hello(name)
  puts "Hello " + name
end

hello "David"
```

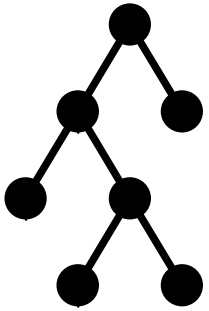
Parsing

Ruby AST



Compilation





PHP AST

Serialization

PHP code

```
<?php
include_once dirname(__FILE__) . "/../../thesis/runtime/src/r2p.php";

do {
  r2p_define_global_method('hello', '_r2p_function_11', array(1, 1));
  function _r2p_function_11() {
    global $r2p_main;
    $params = func_get_args();
    $r2p_self = r2p_method_enter($params, array('name'), array(), null, null);
    $_r2p_tmp_8 = $r2p_self;
    $_r2p_tmp_6 = r2p_call(r2p_string('Hello '), '+', r2p_local_var_get('name'));
    if (r2p_exception_needs_handling()) {
      return;
    };
    $_r2p_tmp_9 = r2p_call($_r2p_tmp_8, 'puts', $_r2p_tmp_6);
    if (r2p_exception_needs_handling()) {
      return;
    };
    $_r2p_tmp_10 = $_r2p_tmp_9;
    r2p_method_leave();
    return $_r2p_tmp_10;
  };
  r2p_call($r2p_self, 'hello', r2p_string('David'));
  if (r2p_exception_needs_handling()) {
    break;
  };
} while (false);
if (r2p_exception_needs_handling()) {
  r2p_toplevel_exception_handler();
}
?>
```

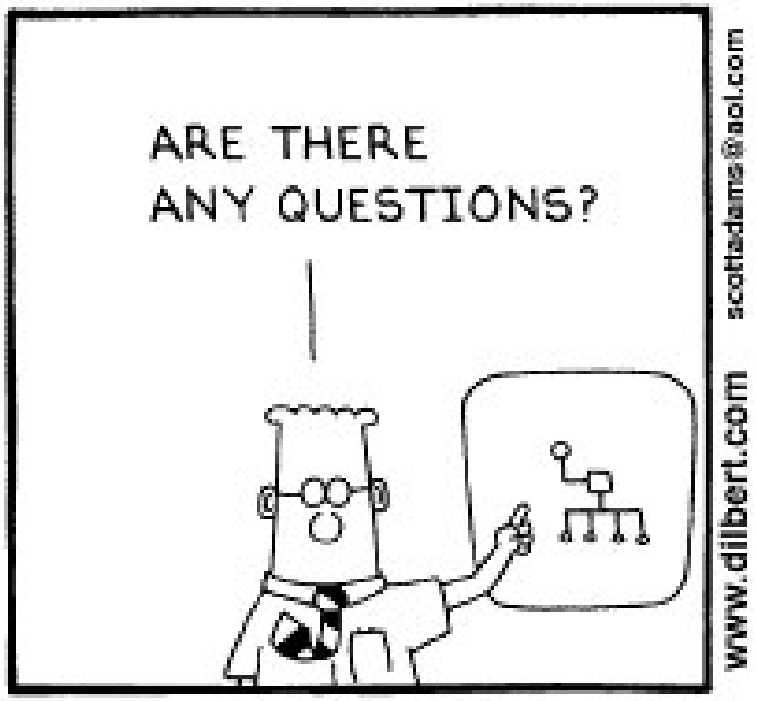
Project Status

- Under development
  - Incomplete
  - Unstable
  - Needs a lot polishing
- However...
  - Already supports most Ruby syntax
  - Implementes basic functionality of core Ruby classes
    - Object, Module, Class, Fixnum, Bignum, Float, Array, Hash, Range,...

Live demo

Future Development

- Finish the thesis (summer 2008)
- Open the code
- Implement, implement, implement,...
- ...finally: run Ruby on Rails



www.ruby-php.org