

关于视频课

- 目的：在实际项目中，我们学习的知识是如何被使用的
- 涉及到代码的部分，建议在 PC 上收看

05. OPM 项目概览

OPM

- OpenResty 包管理器
- 为数不多的官方 web 开源项目：API 接口和网站
- 纯 OpenResty + PostgreSQL 驱动
- 简单的页面：<https://opm.openresty.org/>



OPM - OpenResty Package Manager

How to Use

Please read the [opm documentation](#) for more details.

Recent Uploads

We already have 530 successful uploads across 201 distinct package names from 90 contributors. Come on, OPM authors!

Indexed	GUI/lua-shell-games	v1.0.1	Execute shell commands while capturing their output and exit codes. Includes helpers for performing shell escaping/quoting.	GUI	2019-05-01 03:24:52.653604+00
Indexed	toruneko/lua-resty-aurus	v0.0.2	A Simple RuleEngine for OpenResty/LuaJIT which named Taurus	toruneko	2019-04-20 03:19:25.773437+00
Indexed	zhangbao0325/opmorange	v0.7	orange 3rd party	zhangbao0325	2019-04-17 07:07:25.744947+00
Indexed	zhangbao0325/orangetest1	v0.0.1	orange	zhangbao0325	2019-04-17 05:58:11.935775+00
Indexed	toruneko/lua-resty-upstream	v0.0.6	pure lua nginx upstream management for OpenResty/LuaJIT	toruneko	2019-04-17 01:14:16.239415+00
Indexed	zhangbao0325/orange	v0.0.1	orange-0.7	zhangbao0325	2019-04-16 13:51:39.898901+00
Indexed	zhangbao0325/lua-resty-dns-client-test	v2.2.0	lua-resty-dns-client-2.2.0	zhangbao0325	2019-04-16 11:03:02.050552+00
Indexed	zhangbao0325/resty-dns-client	v2.2.0	resty-dns-client-2.2.0	zhangbao0325	2019-04-16 10:15:36.644314+00
Indexed	zhangbao0325/opmorange	v0.01	opm example package, also the most simple opm package	zhangbao0325	2019-04-15 11:10:21.122486+00
Indexed	zhangbao0325/opmexample	v1.0.0	opm example package, also the most simple opm package	zhangbao0325	2019-04-15 10:55:53.108106+00
Indexed	lblasc/lua-telegraf	v1.1.2	Lua/OpenResty client writer for Telegraf	lblasc	2019-04-15 08:13:45.551696+00

学习目的

- 基于 OpenResty 的 web 项目的目录结构
- NGINX 配置文件和 Lua 代码如何配合
- OpenResty 的作者怎么写 OpenResty 代码

目录结构

openresty / opm

Watch

31

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Fork

51

<> Code

Issues

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Pull requests

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OpenResty Package Manager

<https://opm.openresty.org/>

Edit

Manage topics

197 commits

1 branch

7 releases

9 contributors

Branch: master

New pull request

Create new file

Upload files

Find File

Clone or download

agentzh

doc: updated the copyright years.

Latest commit 66c0ad8 on 20 Apr 2018

bin	bumped version to 0.0.5.	a year ago
util	bumped version to 0.0.5.	a year ago
web	doc: updated the copyright years.	a year ago
.gitignore	feature: opm package server can now sends failure report emails to th...	3 years ago
Makefile	opm bulid: dist.ini: now we explicitly check invalid UTF-8 sequences ...	3 years ago
README.md	doc: updated the copyright years.	a year ago
init.sql	added a comment to init.sql.	2 years ago

README.md

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Issues13

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Branch: master

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History

agentzh

doc: updated the copyright years.

Latest commit 66c0ad8 on 20 Apr 2018

..

conf	bugfix: opm search: we should pick up the last row instead of the fir...	3 years ago
css	web: added a page footer.	3 years ago
images	web: added a simple index web page to show recent 100 uploads.	3 years ago
lua	bumped version to 0.0.5.	a year ago
templates	doc: updated the copyright years.	a year ago
email.ini.example	feature: opm package server can now sends failure report emails to th...	3 years ago

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agentzh

bugfix: opm search: we should pick up the last row instead of the fir...

...

Latest commit 8fabfe4 on 4 Oct 2016

..

<div>get-limiting.conf</div>	web: improved the nginx configuration a bit.	3 years ago
<div>mime.types</div>	web: improved the nginx configuration a bit.	3 years ago
<div>nginx.conf</div>	bugfix: opm search: we should pick up the last row instead of the fir...	3 years ago
<div>root-ca.crt</div>	initial check in.	3 years ago

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History

agentzh

bumped version to 0.0.5.

Latest commit aa5e63f on 8 Mar 2018

..

opmserver

updated templates.lua using latest lemplate-p5.

2 years ago

vendor

fixed a bug in the bundled version of pgmoon that does not specify th...

3 years ago

opmserver.lua

bumped version to 0.0.5.

a year ago

openresty / opm

Watch

31

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275

Fork

50

<> Code

Issues

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History

agentzh

fixed a bug in the bundled version of pgmoon that does not specify th...

...

Latest commit ecaf66a on 29 Sep 2016

..

pgmoon

fixed a bug in the bundled version of pgmoon that does not specify th...3 years ago

resty

feature: opm package server can now sends failure report emails to th...3 years ago

pgmoon.lua


initial check in.3 years ago

NGINX 和 Lua 的配合

Lua 代码查找路径




Branch: master ▾ [opm](#) / [web](#) / [conf](#) / [nginx.conf](#)

 **agentzh** bugfix: opm search: we should pick up the last row instead of the fir...
1 contributor


162 lines (118 sloc) | 3.64 KB

```
1 master_process on;
2 worker_processes auto;
3 worker_cpu_affinity auto;
4
5 error_log logs/error.log warn;
6 #error_log logs/error.log debug;
7
8 http {
9     lua_package_path "$prefix/lua/?.lua;$prefix/lua/vendor/?.lua;;";
10
```


Branch: master ▾ [opm](#) / [web](#) / [lua](#) / [Create new file](#) [Upl](#)

 **agentzh** bumped version to 0.0.5. Latest c


..

 [opmserver](#)

updated templates.lua using latest leemplate-p5.

 [vendor](#)

fixed a bug in the bundled version of pgmoon that does not specify th...

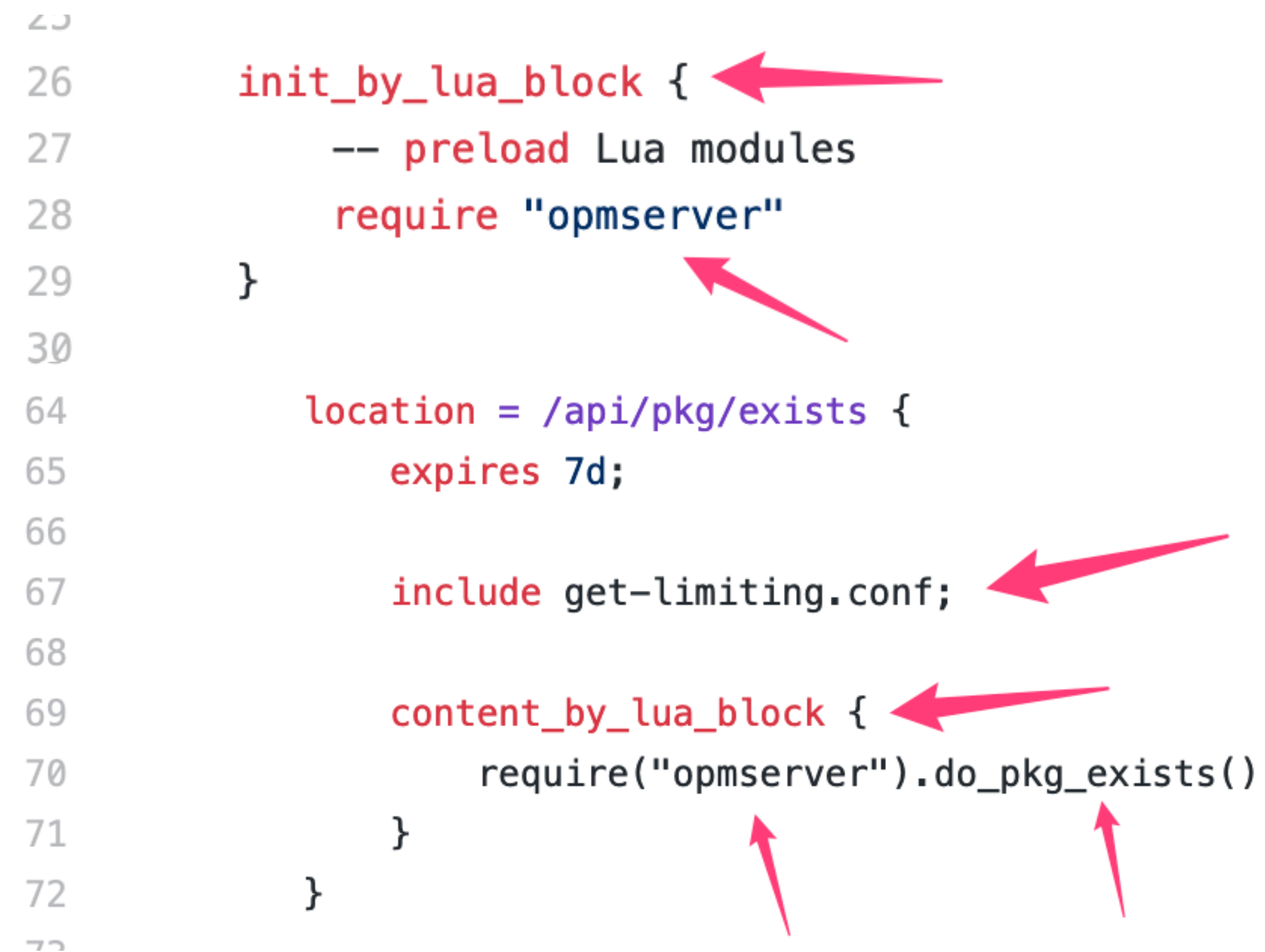
 [opmserver.lua](#)

bumped version to 0.0.5.

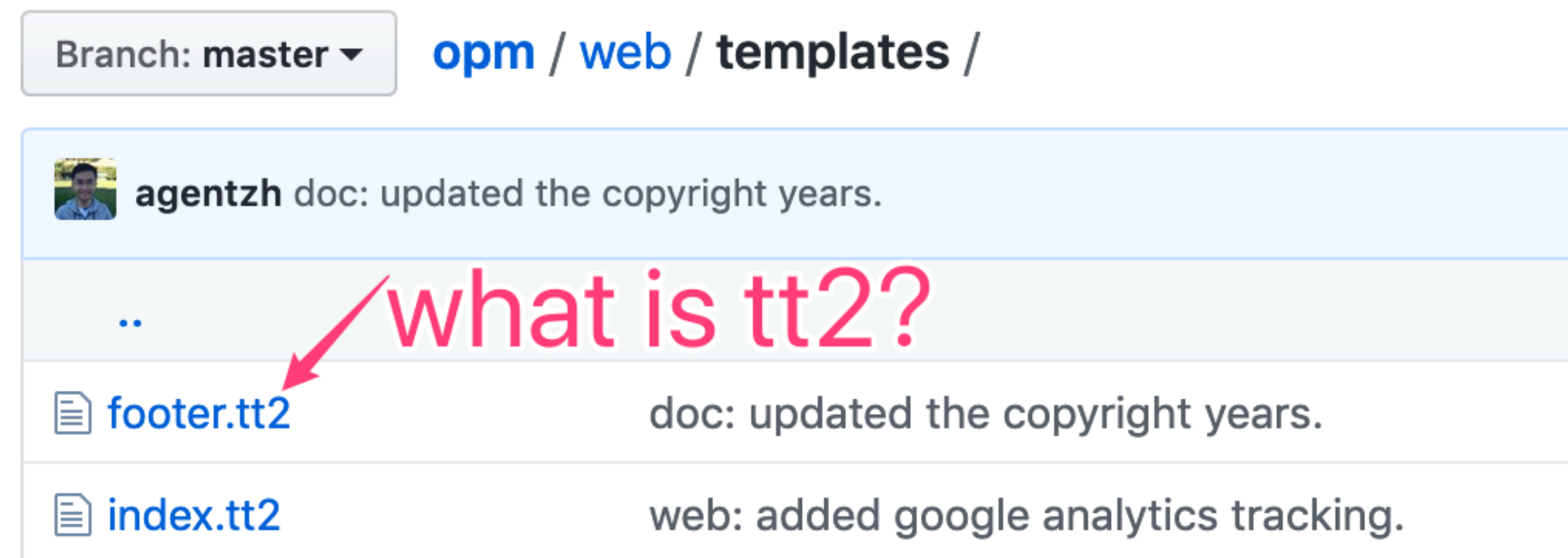
注入 NGINX 执行阶段



```
25
26     init_by_lua_block { ←
27         -- preload Lua modules
28         require "opmserver"
29     }
30
64     location = /api/pkg/exists {
65         expires 7d;
66
67         include get-limiting.conf;
68
69         content_by_lua_block { ←
70             require("opmserver").do_pkg_exists()
71         }
72     }
73
```

The diagram illustrates the injection of Lua code into the NGINX execution flow. It shows a sequence of lines from a configuration file, with red arrows pointing to specific blocks of code. The first arrow points to the 'init_by_lua_block' block, which preloads the 'opmserver' module. The second arrow points to the 'include get-limiting.conf;' line. The third arrow points to the 'content_by_lua_block' block, which calls the 'do_pkg_exists()' function from the 'opmserver' module. The fourth arrow points to the 'require("opmserver").do_pkg_exists()' line, indicating the execution of the injected code.

模板



- Template Toolkit 2 (hence referred to as TT2) is a distribution of Perl modules that can be used to place Perl data into templates, similar to modules like HTML::Template, HTML::Mason, or Text::Template.

Branch: master ▼ [opm](#) / [web](#) / [templates](#) / footer.tt2 **agentzh** doc: updated the copyright years.[1 contributor](#)

11 lines (10 sloc) | 375 Bytes

```
1 <div class="content-footer">
2 <!-- <hr class="footer-sep"/> -->
3 <div class="footer">
4   <p>[% "Copyright © 2016, 2017, 2018 Yichun Zhang (agentzh)" %]</p>
5   <p>[% "100% Powered by OpenResty and PostgreSQL" %]
6     [% "(" %]<a href="https://github.com/openresty/opm/">
7     [% "view the source code of this site" %]</a>[% ")" %]</p>
8   <p>京ICP备16021991号</p>
9 </div>
10 </div>
```

Branch: master ▼ [opm](#) / [web](#) / [lua](#) / opmserver / **agentzh** updated templates.lua using latest lempate-p5.

..

 [email.lua](#) web: fixed coding style in the opmserver.email module. [templates.lua](#) updated templates.lua using latest lempate-p5.

Branch: master ▾

[opm](#) / [web](#) / [lua](#) / [opmserver](#) / templates.lua **agentzh** updated templates.lua using latest lemplate-p5.[1 contributor](#)

440 lines (372 sloc) | 11.9 KB

```
1  --[[
2      This Lua code was generated by Lemplate, the Lua
3      Template Toolkit. Any changes made to this file will be lost the next
4      time the templates are compiled.
5
6      Copyright 2016 - Yichun Zhang (agentzh) - All rights reserved.
7
8      Copyright 2006-2014 - Ingy dot Net - All rights reserved.
9  ]]
10
```



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About 34,900 results (0.24 seconds)

[GitHub - openresty/lemplate: OpenResty/Lua template framework ...](#)

<https://github.com/openresty/lemplate>

OpenResty/Lua template framework implementing Perl's TT2 templating language - openresty/lemplate.

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Lua 代码

local 变量



Branch: master ▾ [opm](#) / [web](#) / [lua](#) / opmserver.lua

agentzh bumped version to 0.0.5.

[2 contributors](#)

1656 lines (1256 sloc) | 46.1 KB

```
1  -- Copyright (C) Yichun Zhang (agentzh)
2
3
4  local DEBUG = false
5  -- local DEBUG = true
6
7
8  local http = require "resty.http"
9  local cJSON = require "cjson.safe"
10 local ngx = require "ngx"
11 local pgmoon = require "pgmoon"
12 local tab_clear = require "table.clear"
13 local limit_req = require "resty.limit.req"
14 local templates = require "opmserver.templates"
15 local email = require "opmserver.email"
16 local send_email = email.send_mail
17
18
19 local re_find = ngx.re.find
20 local re_match = ngx.re.match
21 local str_find = string.find
22 local ngx_var = ngx.var
23 local say = ngx.say
24 local req_read_body = ngx.req.read_body
25 local decode_json = cJSON.decode
26 local encode_json = cJSON.encode
27 local req_method = ngx.req.get_method
```

函数式编程（而不是 OO）



```
78  -- an entry point
79  function _M.do_upload()
80      local ctx = ngx.ctx
81
82      -- check request method.
83
84      if req_method() ~= "PUT" then
85          return ngx.exit(405)
86      end
87
421
422      say("File ", fname, " has been successfully uploaded ",
423          "and will be processed by the server shortly.\n",
424          "The uploaded task ID is ", res[1].id, ".")
425  end
426
```

性能优化



```
1572
1573 local i = 0
1574 for _, row in ipairs(rows) do
1575     local uploader = row.uploader_name
1576     local org = row.org_name
1577     local pkg = row.package_name
1578
1579     local account
1580     if org and org ~= "" and org ~= ngx_null then
1581         account = org
1582
1583     else
1584         account = uploader
1585     end
1586
1587     i = i + 1
1588     results[i] = account
1589
1590     i = i + 1
1591     results[i] = "/"
1592
1593     i = i + 1
1594     results[i] = pkg
1595
```

```
1607         i = i + 1
1608         results[i] = row.abstract
1609
1610         i = i + 1
1611         results[i] = "\n"
1612     end
1613
1614     ngx_print(results)
1615
1616 end
```

更多

- 文档
- 缺失测试案例
- 另外一个项目示例: <https://github.com/openresty/openresty.org>

Q&A