

PM2

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VimConf2014

What's PM2? (short version)

“ProcessManager” version 2

A vital.vim library to provide higher layer synchronous concurrent non-blocking read/write interface.

Requirement: vimproc

PM2 Keynote Agenda

Part 1

- ~~What's PM2? (short version)~~
- What was PM1?
 - Background
 - Distributed systems
- PM2 (long version)

Part 2

What was PM1?

Check my VimConf2013 slides

<http://ow.ly/DXMVe>

Already used in

- `thinca/quickrun.vim`
- `rhysd/unite-ruby-require`

PM background stories

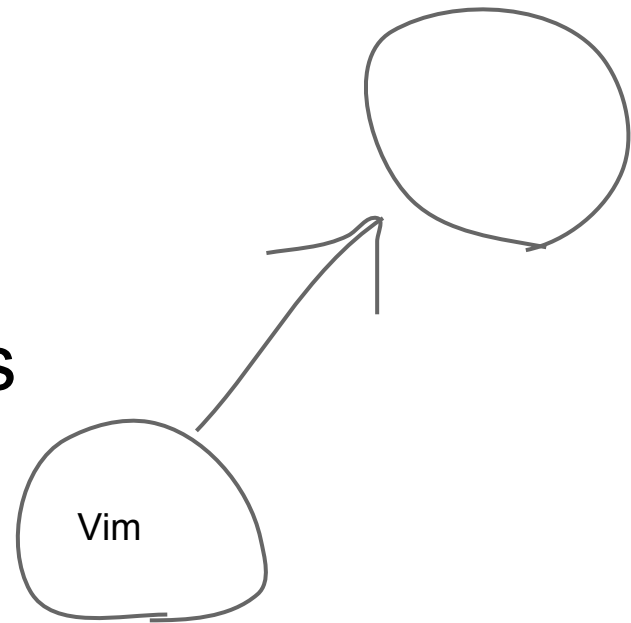
- new programming language
 - syntax/indent files
 - development/debugging support
- external process: bootup speed
 - JVM
 - Even in Ruby w/ libraries

Distributed Systems

are harder than you know (even if you knew.)

- Asynchronous
- Failures everywhere

Plus Latency really matters



Composability / idempotency

Application shouldn't be able not to take care of failure

- automatic retry
- manual retry
- explicit error
- restartable at any time
 - recovery from weird state

Asynchronous process library

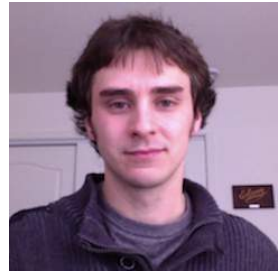
Not a framework

Don't put abstract layers too much

The law of leaky abstractions

issue: timeout management

“Some application developers may push for no timeout and argue it is OK to wait indefinitely. I typically propose they set the timeout to 30 years.[...] Why is 30 years silly but infinity is reasonable?” - Pat Helland



PM1 problems

(Still) Hard to use

Lots of cases to cover in application

PM1 https://github.com/thinca/vim-quickrun/blob/master/autoload/quickrun/runner/process_manager.vim

PM2 <https://github.com/ujihisa/neoclojure.vim/blob/master/autoload/quickrun/runner/neoclojure.vim>

<https://twitter.com/kamichidu/status/344966720378789889>

<https://twitter.com/kamichidu/status/344863136555356160>

<https://gist.github.com/ujihisa/5761509>

ProcessManager version 2.0

PM2

- Different Interface
 - `reserve_read()`
 - `writeln()`
 - `go()`
- Similar Interface
 - return flag (e.g. 'reading')

PM2

Working examples

- quickrun
- neoclojure
 - as a neocomplete plugin
 - as a quickrun runner
- ref
 - clojure doc
 - TODO (integrate to neoclojure)
- unite-build (WIP)

PM2 Status

- Working In Progress
 - I'll release stable version today
 - TODO: name
- Uses
 - merge req to quickrun.vim

Last update was couple months ago

Summary

- Making a Vim plugin with another process is hard
- Vital.ProcessManager makes it easy and doesn't hide details
- ProcessManager2 has better UI for plugin authors

Part2

Before Part 2

What's the name of the scripting language for Vim?

Vim script / Vim scripts

Not VimScript, Vimscript, or VimL

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Tatsuhiro Ujihisa

~2009 Osaka, Japan

2009~ Vancouver, BC, Canada

2010~

Hootsuite Media Inc

Vancouver



Hootsuite





PHP + JS

Scala

akka, play framework, zeromq,
rabbitmq, mysql, mongodb, riak, redis,
zookeeper, and lots more

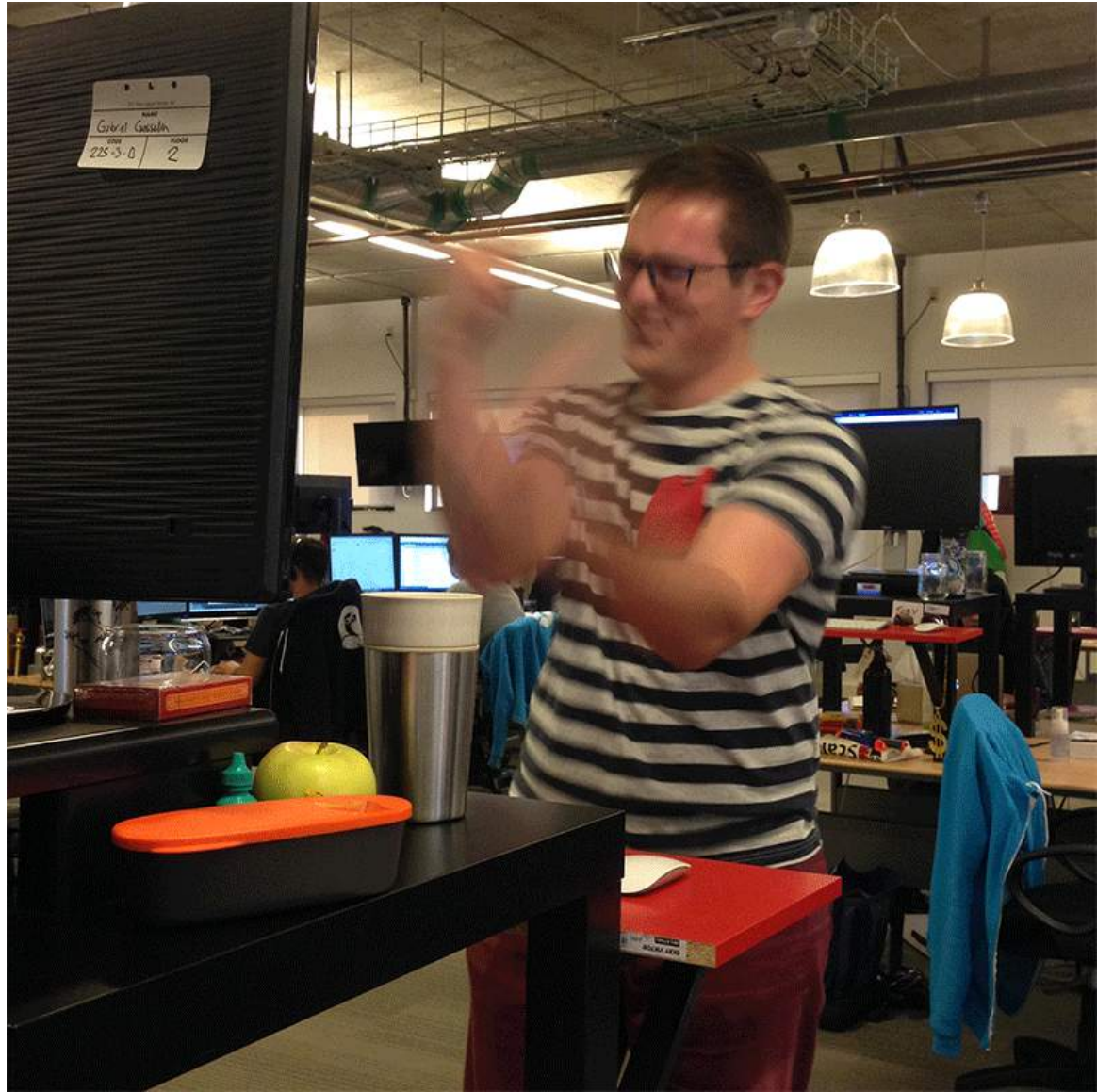
PHPStorm for PHP

IntelliJ IDEA for Scala



Hootsuite is hiring!

<https://hootsuite.com/about/careers>



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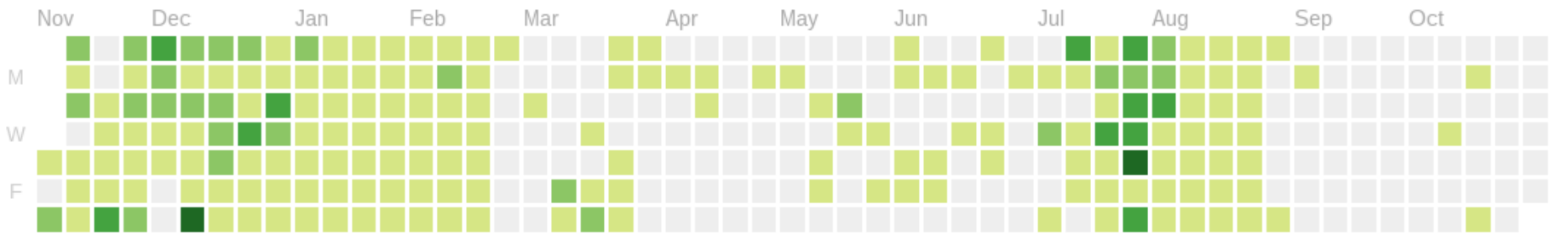
<http://twitter.com/ujihisa>

<http://github.com/ujihisa>

Clojure, Vim script, Haskell, Scala, Ruby
Minecraft, Civilization 5

http://github.com/ujihisa

Contributions



Year of contributions

918 total

Nov 7, 2013 – Nov 7, 2014

Longest streak

78 days

December 8 – February 23

Current streak

0 days

Last contributed 14 days ago

SID MEIER'S CIVILIZATION V

+371 473 (+95) 84 GOLDEN AGE! (2) 652/2215 (+118) 96 (+24) 0 1 0 3 4

Turn: 309 2029 AD | HELP | MENU



Penicillin (9)

23 HIPPO REGIUS

20 ROTTERDAM

21 AMSTERDAM

26 UTRECHT

17 PRAGUE

GEORGE DEWEY (GREAT ADMIRAL)

Movement 4/6

A UNIT NEEDS ORDERS

15 GRONINGEN

Civilization 5 (Brave New World)

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bonus points

- likes world history
- likes optimizations
- likes hacks

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Lessons learned

- Friendship really matters
 - Why bullying / discrimination happens
- Diplomacy is fun
 - Global peaceful is bad in Civ5

Q?