

State of the



ecosystem

Pierre Chapuis, Lua Workshop 2013

 Moodstocks

winch 

Lua-the-language is successful...

- games
- extension language
- embedded
- web
- ...

... but the *community*
is small.

*Lua grows in popularity, slowly and steadily...
all on the power of a couple of good books,
a mailing list and a simple design.*

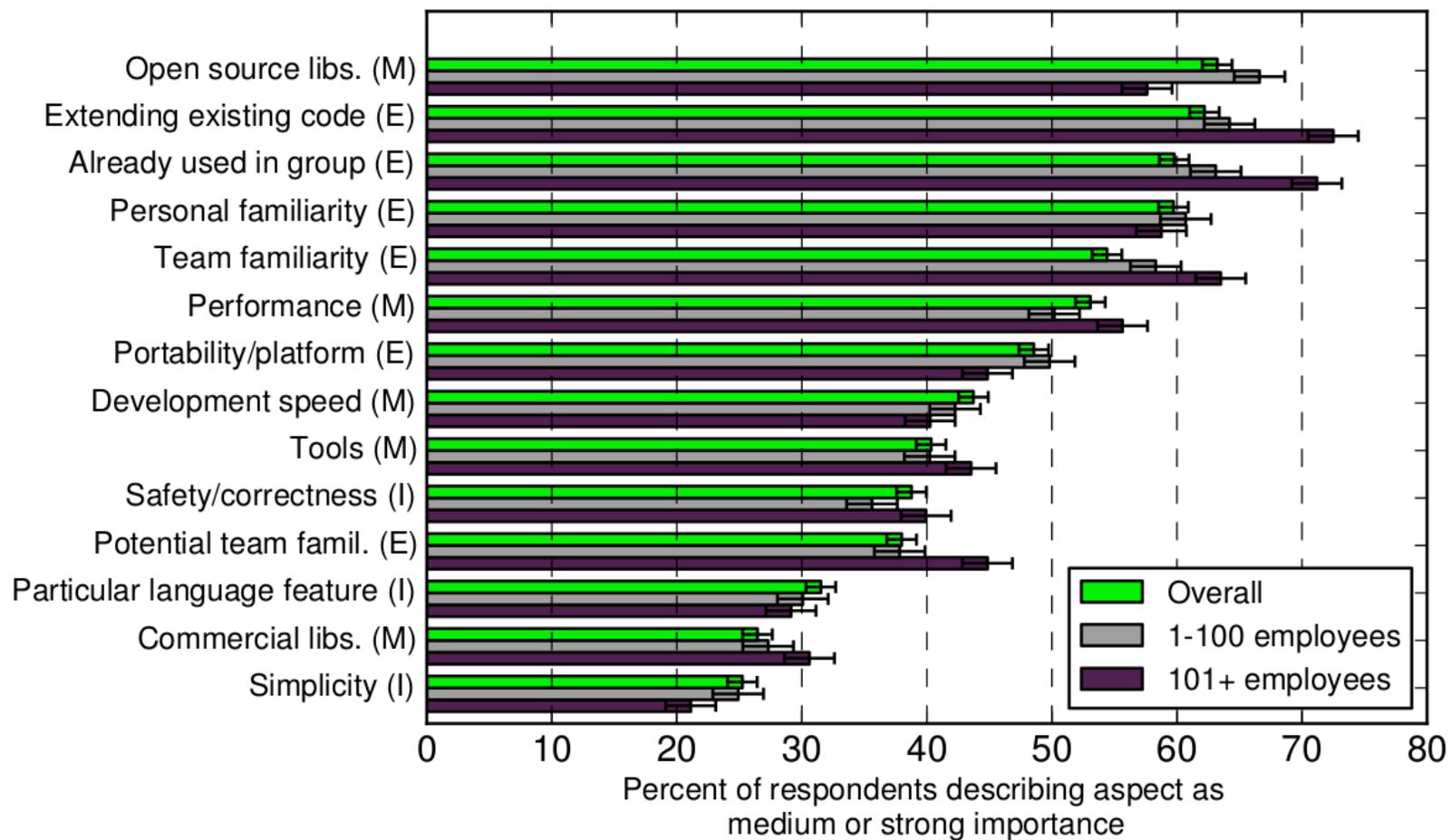
Andrew Starks, lua-l

No one starts projects in Smalltalk anymore. And this is not because Smalltalk isn't wonderful to work with - it is.

But... try just posting a question about Smalltalk to Stack Overflow and see how long it takes just to get answered. Try hiring a senior Smalltalk developer - good luck.

[One of them] told me that he comes to a couple of Ruby conferences every year, and I said "why don't you go to Smalltalk conferences?" and he said "because there aren't any."

Sarah Mei, Why hasn't Ruby won?



Meyerovich & Rabkin, OOPSLA 2013

▲ jrockway 1130 days ago | [link](#) | [parent](#)

Why has Lua adoption been so slow outside the game world?

No libraries.

Standard libraries

*Five years ago, I always assumed
the Python library contained
the “best of breed” for all packages.
These days, I tend to think the opposite.*

Dusty Phillips, Dead Batteries Included

*The standard library
is where modules
go to die.*

Kenneth Reitz, Djangocon 2012



Brian

@brixen



Following

If you thought Ruby standard library doesn't have a problem, try fetching some bits from the internet stackoverflow.com/questions/9296...

 Reply  Retweet  Favorite  More

 Stack Exchange

equivalent of curl for Ruby?

Is there a curl library for Ruby?

[View on stackoverflow.com](https://stackoverflow.com)





Miles Sabin @milessabin

1m

@nuttycom "there is no stdlib" is another solution to the "you can only use it if it's in the stdlib" problem. /cc @djspiewak @seanparsons

 Retweeted by Clément Delafargue

 Hide conversation

 Reply

 Retweet

 Favorite

 More

1
RETWEET



7:16 PM - 24 Sep 13 · Details



Reply to @milessabin @clementd @nuttycom @djspiewak @seanparso...



Eiríkr Ásheim @d6

1m

@milessabin @nuttycom @djspiewak @seanparsons We saved the standard library by burning it down.

Expand

Penlight

Contributed modules

Wanted

- quantity: *There is no module to solve my problem.*
- quality: *New dependency, new bugs :(Where is the maintainer?*
- ease of use: *How do I install this without breaking my system?*
- consistency: *Why does my application depend on 25 object libraries?*
- discoverability: *I cannot find what module solves that problem.*

Quantity

*There is no module
to solve my problem.*

Is there Lua-based barcode reading? (self.lua)

submitted 10 hours ago by Jack9

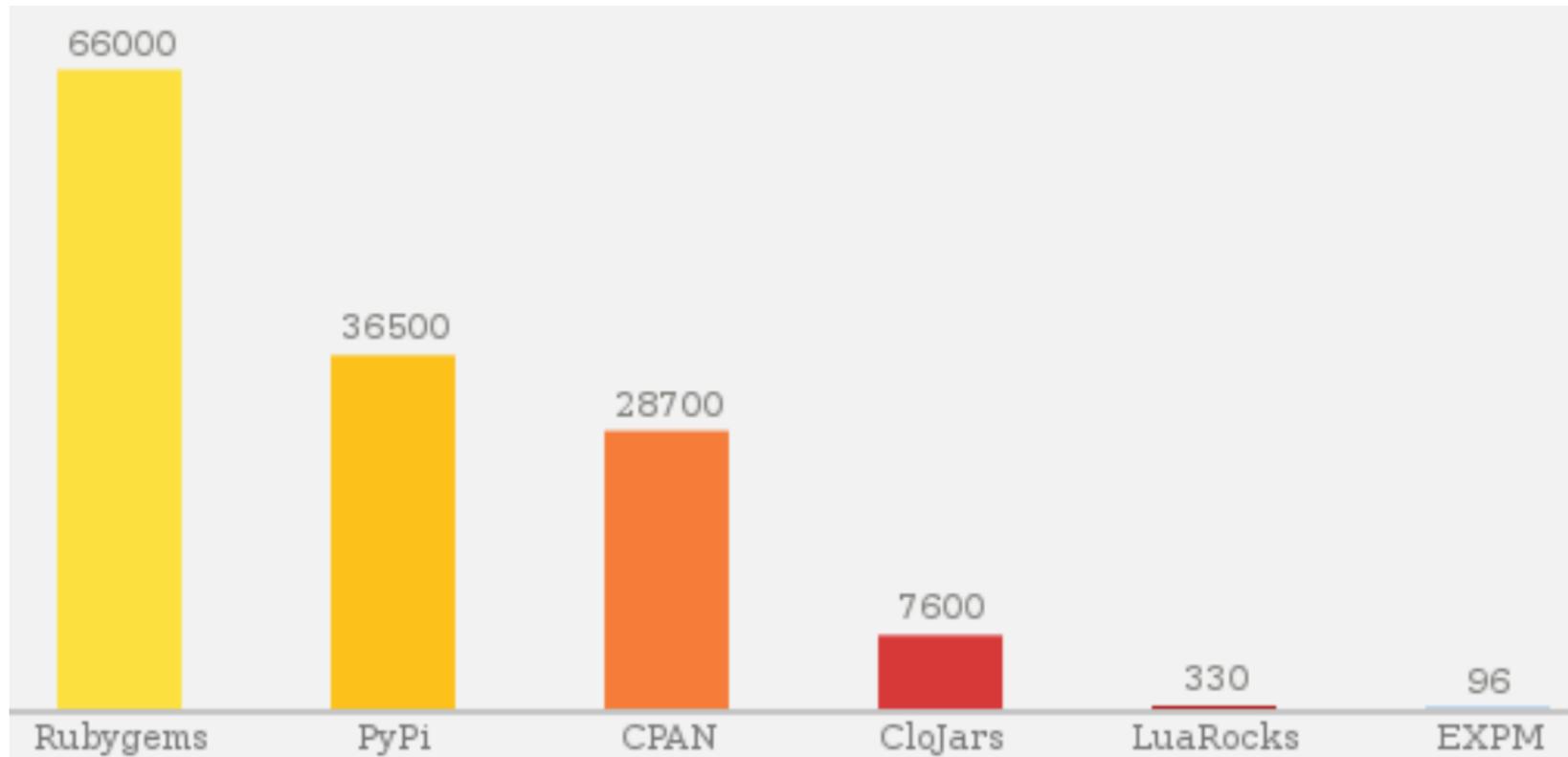
This is a shortlist of barcode ocr libs with lua bindings:

http://www.exactcode.com/site/open_source/exactimage/

<http://luatesseract.luaforge.net/>

<http://www.tcs.eng.br/freesoftware/luabarcodes/index.html.en>

I don't see any lua implemented barcode image readers. Has anyone seen it or just attempted?



Number of modules in the package managers for some dynamic languages.

Quality (1)

*New dependency,
new bugs :(*

```
local redis = require "redis"  
local client = redis.connect("unix:///tmp/redis.sock")  
require "socket"  
print(socket.tcp)  
-- result: nil, why?
```

The root of all Evil

- Avoid globals in modules.
- `local foo = require "foo"`
- Use `pl.strict` in your test suite (please).
- You have tests, don't you?!

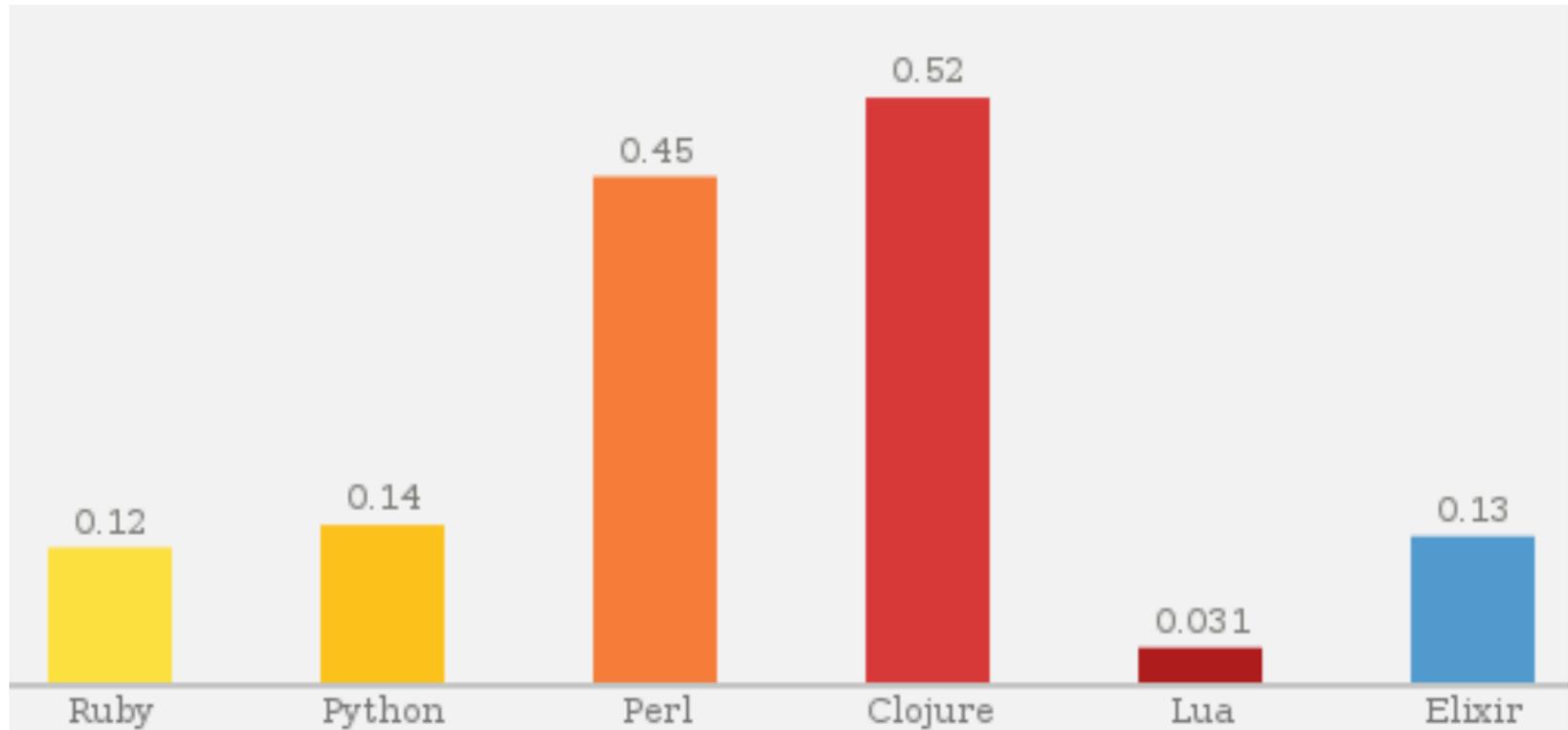
```
-- a special syntax sugar to export all functions
-- to the global table
setmetatable(exports, {
  __call = function(t)
    for k, v in pairs(t) do _G[k] = v end
  end,
})
```

Quality (2)

*Where is the
maintainer?*

Ease of use

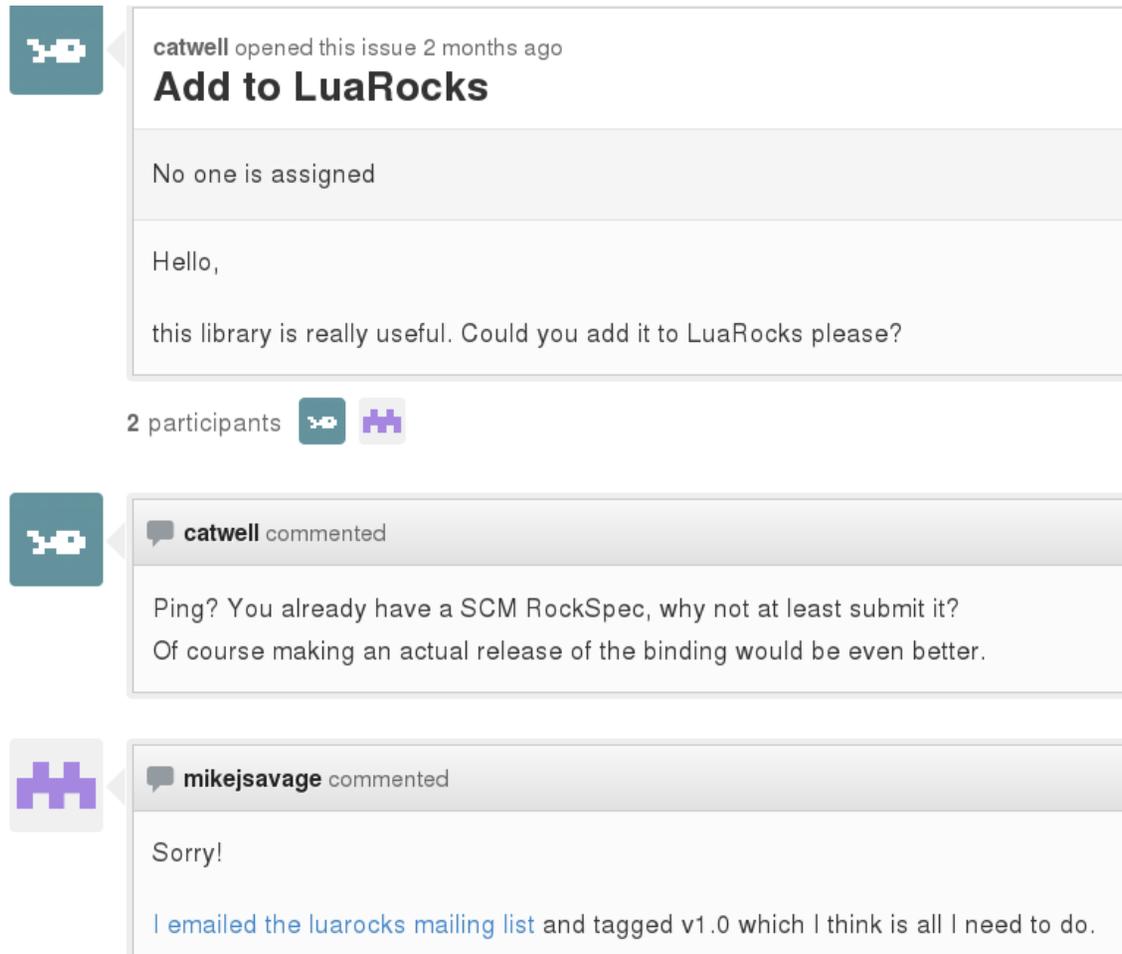
*How do I install this
without breaking
my system?*



Number of modules divided by number of GitHub repositories created from Jan 2012 to Aug 2013.

People still do not
use LuaRocks enough

Pester maintainers, it works!



The image shows a screenshot of a GitHub issue thread. The issue is titled "Add to LuaRocks" and was opened by user "catwell" 2 months ago. The issue is currently unassigned. The main body of the issue contains a message from "catwell" asking for the library to be added to LuaRocks. Below the issue body, there are two comments. The first comment is from "catwell" asking for a ping and suggesting to submit a RockSpec. The second comment is from "mikejsavage" who says "Sorry!" and mentions emailing the mailing list and tagging v1.0.

 **catwell** opened this issue 2 months ago
Add to LuaRocks

No one is assigned

Hello,

this library is really useful. Could you add it to LuaRocks please?

2 participants  

 **catwell** commented

Ping? You already have a SCM RockSpec, why not at least submit it?
Of course making an actual release of the binding would be even better.

 **mikejsavage** commented

Sorry!

[I emailed the luarocks mailing list](#) and tagged v1.0 which I think is all I need to do.

Consistency

*Why does
my application depend
on 25 object libraries?*

A comparison of JSON modules

Since some modules were only called "json" initials were added to create unique names:

- **cmj-JSON4Lua** (version 0.9.5):
 - <http://json.luaforge.net/>
 - Pure Lua.
 - MIT/X11 license (since version 0.9.3, GNU GPL before that).
- **dkjson** (version 2.1):
 - <http://dkolf.de/src/dkjson-lua.fsl/>
 - Pure Lua, optional [LuaPeg](#) support (used LPeg 0.10 at the time of testing).
 - MIT/X11 license.
- **Fleece** (version 0.3.1):
 - <http://www.eonblast.com/fleece/>
 - Encoding only.
 - C-module.
 - Public license with non-commercial restriction.
- **jf-JSON** (version 4)
 - <http://regex.info/blog/lua/json>
 - Pure Lua.
 - Creative Commons Attribution 3.0 Unported License.
- **Lua-Yajl** (version 2.0):
 - <http://github.com/brimworks/lua-yajl>
 - C-module, requires [\[Yajl\]](#) (used version 2.0.1 at the time of testing).
 - Can be used for streaming by writing handlers that deal with JSON on the fly.
 - Lua-Yajl uses the MIT/X11 license, Yajl itself uses the ISC license.
- **mp-CJSON / Lua CJSON** (version 1.0.2):
 - <http://www.kyne.com.au/~mark/software/lua-cjson.php>
 - C-module.
 - MIT/X11 license.
- **nm-luajsonlib / LuaJSON C Library** (version 1.2):
 - <http://luaforge.net/projects/luajsonlib/>
 - C-module.
 - Public domain.
- **sb-Json** (2007 version):
 - <http://www.chipmunkav.com/downloads/json.lua>
 - Pure Lua.
 - MIT/X11 license with the added sentence "If you find this software useful please give www.chipmunkav.com a mention."
- **th-LuaJSON** (version 1.2.1):
 - <http://luaforge.net/projects/luajson/>
 - Implemented in Lua, depends on the C-module [LuaPeg](#) (used LPeg 0.10 at the time

Contribute
instead of reinventing



catwell opened this issue 8 months ago

Edit

Merge with luajit-nanomsg

No one is assigned

No milestone

Hello,

you wrote a FFI binding, I wrote [a FFI binding...](#)

I don't think we need too many projects for this. What do you think if I stop working on mine and start contributing to this one instead?

I would probably add stuff like a Makefile, tests (we have to decide on a framework, I have written [a small one](#) which I [used in luajit-nanomsg](#) but maybe you prefer something like [busted?](#)), a rockspec...

2 participants



neomantra commented

8 months ago

Hello, this all sounds good to me, especially since we have the same goals (simple LuaJIT-specific binding) . I looked at your binding but wanted to have some higher-level objects.

I just gave you commit access.

As long as the test framework is easy to install (luarocks, or even a just Lua file in the repo), I'm fine with that.

Also, perhaps the name of your repo is better? I intentionally made a different name to prevent confusion.

At least share an API

Incompatible ecosystems

- 5.2
- LuaJIT
- Luvit
- OpenResty
- probably others

I have no answer to that.

Discoverability

*I cannot find
what module
solves that problem.*

Finding a module

- LuaRocks
- Lua Wiki
- Google
- Github
- Mailing List
- Stack Overflow

Finding *the best* module

YOUR ENDORSEMENTS

luasocket
Network support for the Lua language
Endorsed by: Pierre Chapuis.
Labels: [network](#) **ENDORSED**

luafilesystem
File System Library for the Lua Programming Language
Endorsed by: Pierre Chapuis.
Labels: [filesystem](#) **ENDORSED**

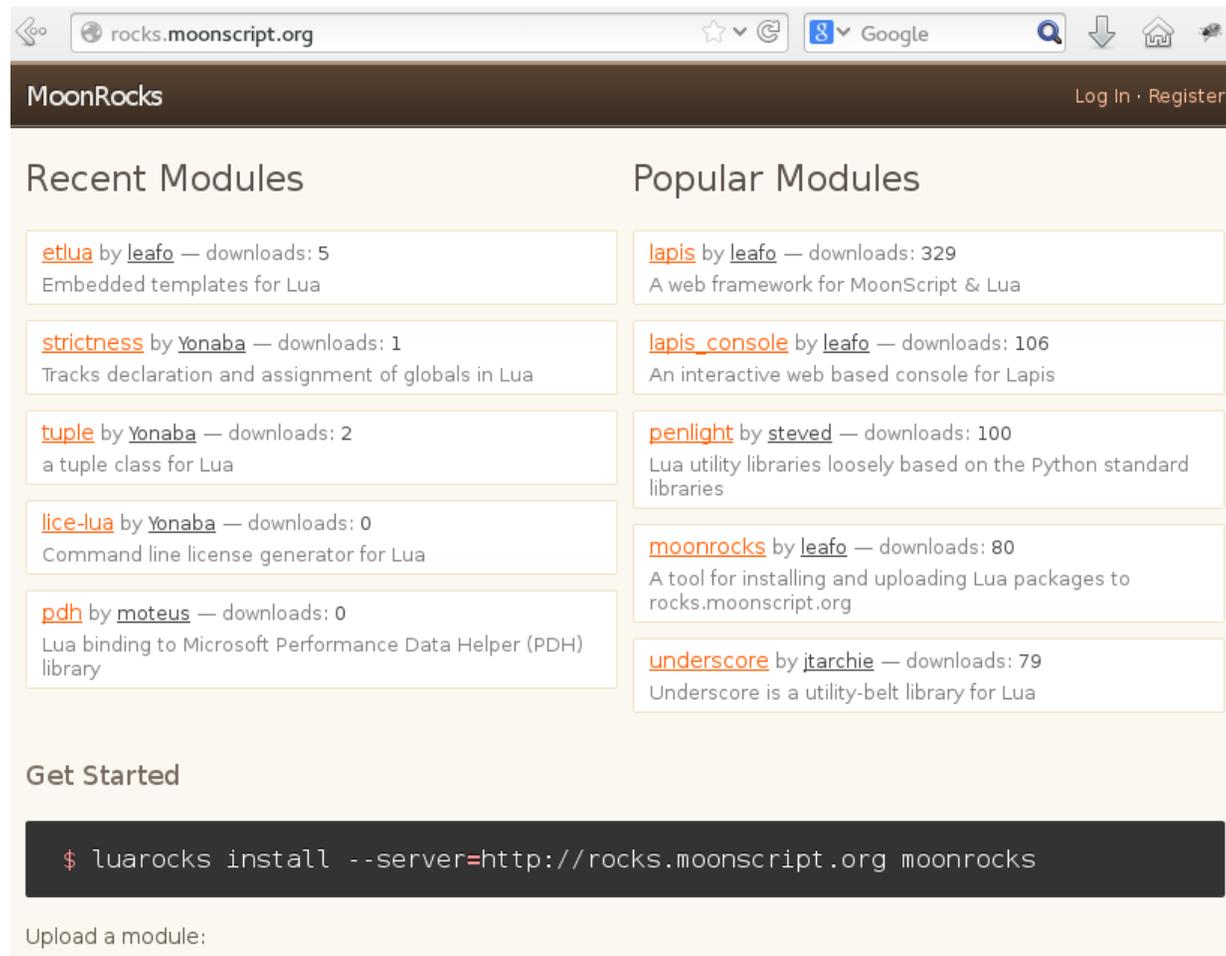
luaposix
Lua bindings for POSIX (including curses)
Endorsed by: Pierre Chapuis.
Labels: [commandline](#) **ENDORSED**

copas
Coroutine Oriented Portable Asynchronous Services
ENDORSED

Suggestions

Let's open discussions.

Programmatic releases for LuaRocks



The screenshot shows the MoonRocks website interface. The browser address bar displays 'rocks.moonscript.org'. The site header includes 'MoonRocks' and 'Log In · Register'. The main content is divided into two columns: 'Recent Modules' and 'Popular Modules'. Each module entry includes a link to the module, the author's name, the number of downloads, and a brief description. Below the module lists is a 'Get Started' section with a terminal command for installing MoonRocks. At the bottom, there is a prompt to 'Upload a module:'.

rocks.moonscript.org

MoonRocks Log In · Register

Recent Modules

- [etlua](#) by [leafo](#) — downloads: 5
Embedded templates for Lua
- [strictness](#) by [Yonaba](#) — downloads: 1
Tracks declaration and assignment of globals in Lua
- [tuple](#) by [Yonaba](#) — downloads: 2
a tuple class for Lua
- [lice-lua](#) by [Yonaba](#) — downloads: 0
Command line license generator for Lua
- [pdh](#) by [moteus](#) — downloads: 0
Lua binding to Microsoft Performance Data Helper (PDH) library

Popular Modules

- [lapis](#) by [leafo](#) — downloads: 329
A web framework for MoonScript & Lua
- [lapis_console](#) by [leafo](#) — downloads: 106
An interactive web based console for Lapis
- [penlight](#) by [steved](#) — downloads: 100
Lua utility libraries loosely based on the Python standard libraries
- [moonrocks](#) by [leafo](#) — downloads: 80
A tool for installing and uploading Lua packages to rocks.moonscript.org
- [underscore](#) by [jtarchie](#) — downloads: 79
Underscore is a utility-belt library for Lua

Get Started

```
$ luarocks install --server=http://rocks.moonscript.org moonrocks
```

Upload a module:

Multiple maintainers for "Core" libraries

- LuaSocket
- LuaFileSystem
- LuaSec / LuaCrypto
- LuaExpat

style guide

Yes, I know that Lua module naming in the wild is a total train wreck. This is one of the biggest failures of the Lua ecosystem.

Language ecosystems with user-contributed modules demand curation. Or at least some officially sanctioned conventions. Remember that next time you create your own language.

Anything that attempts to retain the illusion that a flat namespace is somehow a workable solution is NOT helpful.

Mike Pall, LuaJIT ML

Most important:
contribute!

Thanks for listening.
Questions?