# Lua基础

# Lua介绍

特点:轻量、小巧。C语言开发。开源。

设计的目的:嵌入到应用程序当中,提供灵活的扩展和定制化的功能。

lua+nginx , lua+redis。

# 环境安装

windows上安装lua:

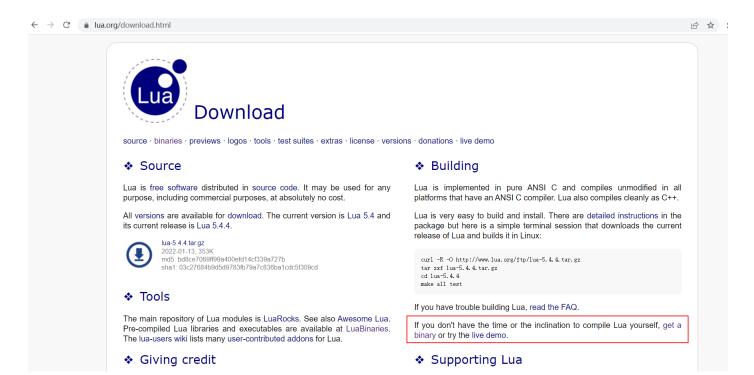
检查机器上是否有lua

C:\Users\cpf>lua 'lua' 不是内部或外部命令,也不是可运行的程序 或批处理文件。

C:\Users\cpf>

打开官网: lua.org





#### ← → C 🛕 不安全 | luabinaries.sourceforge.net Luabinaries Home Overview LuaBinaries is a distribution of the Lua libraries and executables compiled for several platforms. Motivation Installation This distribution offers a standard set of Lua libraries for the available platforms that can be used in any project that wants to be compatible with Tecgraf/PUC-Rio products and History Kepler Project components. Credits Contact us LuaBinaries is free software and uses the same license as Lua 5 Manual Configuration **Packaging** Since Lua offers no standard set of libraries, many projects and teams have to build their own version of the Lua libraries and this can create binary incompatibilities among the Download resulting products. License Tecgraf/PUC-Rio and Kepler Project teams have a lot of shared products, so it made no sense to keep maintaining two (incompatible) sets of Lua libraries in parallel. While it would be nice to have a single standard for the whole Lua community, that is still not the reality. So both teams merged their requirements and now use a common set of files. Those files are called LuaBinaries and are available here for other Lua developers that want to use them. Using a common set of libraries has some advantages for the developer:

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- Easier interoperability with other products based on LuaBinaries
   Easter actual time for powel up developera
- Faster setup time for new Lua developers

If you need to recompile from sources and would like to ensure LuaBinaries compatibility, use the source package available at the LuaBinaries Download with no modifications. In fact the only change from the Lua.org package is the name of library and executable that use "luaXX" instead of "lua", where XX is the version number.

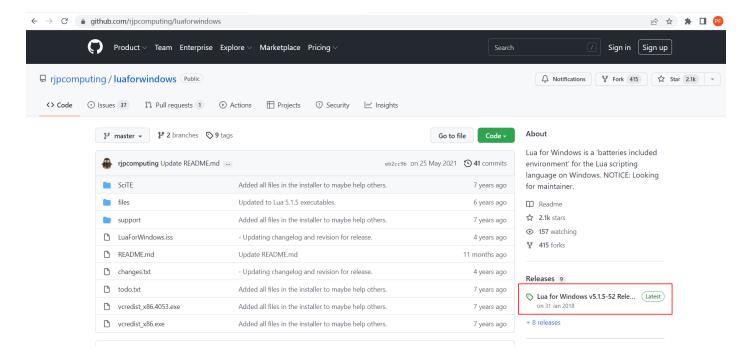
#### Installation

The LuaBinaries files are intended for advanced users and programmers who want to incorporate Lua in their applications or distributions and would like to keep compatibility with LuaBinaries, so they also will be compatible with many other modules available on the Internet. Get it from SourceForge or from the **dedicated servers** it is hosted in.

If what you want is a full Lua installation, please check other projects such as the Lua for Windows, LuaDist or LuaRocks

### History

## 点击下载:



得到文件:LuaForWindows\_v5.1.5-52.exe

双击,一直下一步。

验证安装结果:



# linux安装lua

官网:https://www.lua.org/



source · binaries · previews · logos · tools · test suites · extras · license · versions · donations · live demo

#### Source

Lua is free software distributed in source code. It may be used for any purpose, including commercial purposes, at absolutely no cost.

All versions are available for download. The current version is Lua 5.4 and its current release is Lua  $5.4.4.\,$ 



lua-5.4.4.tar.gz 2022-01-13, 353K md5: bd8cc7069ff99a400efd14cf339a727b sha1: 03c27684b9d5d9783fb79a7c836ba1cdc5f309cd

#### ❖ Tools

The main repository of Lua modules is LuaRocks. See also Awesome Lua. Pre-compiled Lua libraries and executables are available at LuaBinaries. The lua-users wiki lists many user-contributed addons for Lua.

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[root@localhost lua-5.4.4]# make install

#### Building

Lua is implemented in pure ANSI C and compiles unmodified in all platforms that have an ANSI C compiler. Lua also compiles cleanly as C++.

Lua is very easy to build and install. There are detailed instructions in the package but here is a simple terminal session that downloads the current release of Lua and builds it in Linux:

curl -R -0 http://www.lua.org/ftp/lua-5.4.4.tar.gz tar zxf lua-5.4.4.tar.gz cd lua-5.4.4 make all test

If you have trouble building Lua, read the FAQ.

If you don't have the time or the inclination to compile Lua yourself, get a binary or try the live demo.

\* Cupporting Lus

## 步骤:

[root@localhost /]# mkdir lua [root@localhost /]# cd lua/ [root@localhost lua]# curl -R -O http://www.lua.org/ftp/lua-5.4.4.tar.gz % Total % Received % Xferd Average Speed Time Time Time Current Dload Upload Total Spent Left Speed 100 352k 100 352k 0 0 16242 0 0:00:22 0:00:22 --:--: 9753 [root@localhost lua]# || total 356 -rw-r--r--. 1 root root 360876 Jan 13 11:15 lua-5.4.4.tar.gz [root@localhost lua]# tar zxf lua-5.4.4.tar.gz [root@localhost lua]# || total 356 drwxr-xr-x. 4 1026 1000 58 Jan 13 11:15 lua-5.4.4 -rw-r--r-. 1 root root 360876 Jan 13 11:15 lua-5.4.4.tar.gz [root@localhost lua]# cd lua-5.4.4 [root@localhost lua-5.4.4]# || total 12 drwxr-xr-x. 2 1026 1000 189 Jan 13 06:33 doc -rw-r--r-- 1 1026 1000 3146 Nov 4 12:25 Makefile -rw-r--r--. 1 1026 1000 151 Jan 13 11:15 README drwxr-xr-x. 2 1026 1000 4096 Jan 13 06:29 src [root@localhost lua-5.4.4]# make all test

# 检查lua脚本: [root@localhost lua-5.4.4]# lua -v Lua 5.1.4 Copyright (C) 1994-2008 Lua.org, PUC-Rio [root@localhost lua-5.4.4]# cd /usr/local/bin/ [root@localhost bin]# ./lua -v Lua 5.4.4 Copyright (C) 1994-2022 Lua.org, PUC-Rio

# 编程方式

[root@localhost bin]#

# 交互式:

## linux:

```
[root@localhost lua-script]# lua
Lua 5.1.4 Copyright (C) 1994-2008 Lua.org, PUC-Rio
> print("hello")
hello
> ^C
```

## windows:

```
D:\lua>lua
Lua 5.1.5 Copyright (C) 1994-2012 Lua.org, PUC-Rio
> print("hello")
hello
>
```

# 脚本式:

## linux:

```
[root@localhost lua-script]# pwd
/lua/lua-script
[root@localhost lua-script]# vi hello.lua
[root@localhost lua-script]# lua hello.lua
script lua
[root@localhost lua-script]#
```

# windows

D:\lua>lua hello.lua script lua win

D:\lua>