

TeX Live 的安装简单教程



耿楠

2019 年 夏

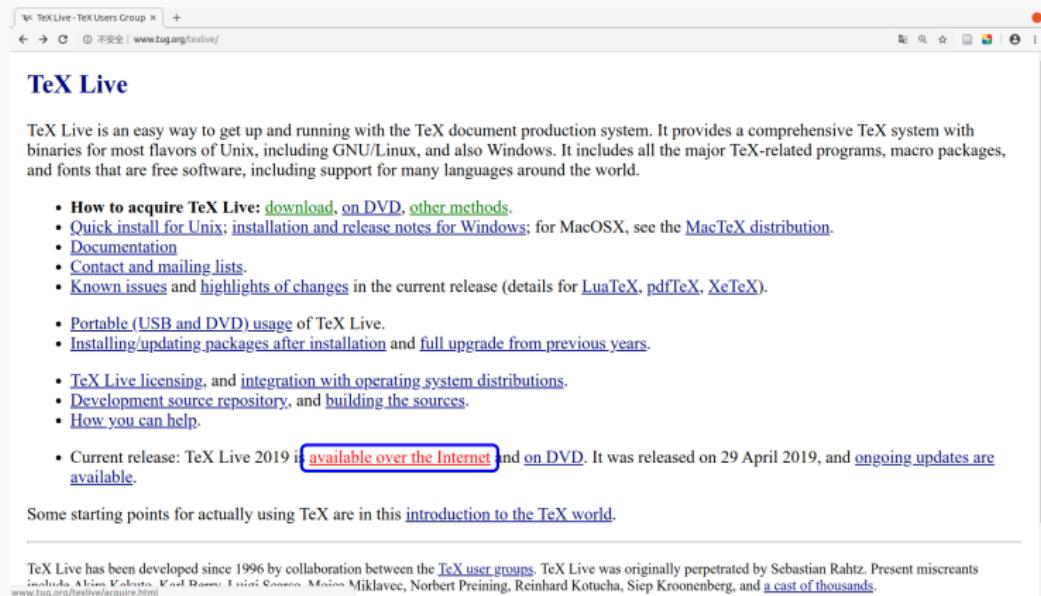
西北农林科技大学教学发展中心

下载 TeX Live

☛ 下载

☞ <http://www.tug.org/texlive/> ↗

☞ 单击 **TeX Live 2019** 下载链接



TeX Live

TeX Live is an easy way to get up and running with the TeX document production system. It provides a comprehensive TeX system with binaries for most flavors of Unix, including GNU/Linux, and also Windows. It includes all the major TeX-related programs, macro packages, and fonts that are free software, including support for many languages around the world.

- **How to acquire TeX Live:** [download](#), [on DVD](#), [other methods](#).
- Quick install for Unix; [installation and release notes for Windows](#); for MacOSX, see the [MacTeX distribution](#).
- [Documentation](#)
- [Contact and mailing lists](#).
- [Known issues](#) and [highlights of changes](#) in the current release (details for [LuaTeX](#), [pdfTeX](#), [XeTeX](#)).
- [Portable \(USB and DVD\) usage of TeX Live](#).
- [Installing/updating packages after installation](#) and [full upgrade from previous years](#).
- [TeX Live licensing](#), and [integration with operating system distributions](#).
- [Development source repository](#), and [building the sources](#).
- [How you can help](#).
- Current release: TeX Live 2019 is **available over the Internet** and [on DVD](#). It was released on 29 April 2019, and [ongoing updates are available](#).

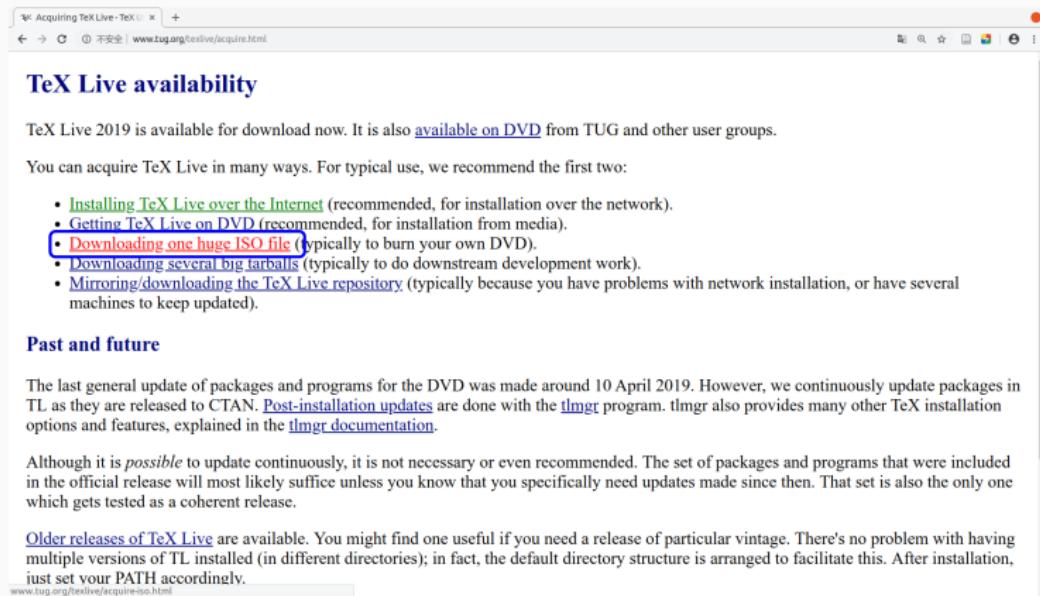
Some starting points for actually using TeX are in this [introduction to the TeX world](#).

TeX Live has been developed since 1996 by collaboration between the [TeX user groups](#). TeX Live was originally perpetrated by Sebastian Rahtz. Present miscreants include Alain Valente, Karl Berry, Luigi Sosso, Mauro Miklavec, Norbert Preining, Reinhard Kotucha, Siep Kroonenberg, and a [cast of thousands](#).
www.tug.org/texlive/acquire.html

☛ 下载

☞ <http://www.tug.org/texlive/> ↗

↙ 单击ISO 镜像文件下载链接



The screenshot shows a web browser window with the title 'Acquiring TeX Live - TeX Live'. The URL in the address bar is www.tug.org/btexlive/acquire.html. The main content area is titled 'TeX Live availability' and contains the following text:

TeX Live 2019 is available for download now. It is also [available on DVD](#) from TUG and other user groups.

You can acquire TeX Live in many ways. For typical use, we recommend the first two:

- [Installing TeX Live over the Internet](#) (recommended, for installation over the network).
- [Getting TeX Live on DVD](#) (recommended, for installation from media).
- **[Downloading one huge ISO file](#)** (typically to burn your own DVD).
- [Downloading several big tarballs](#) (typically to do downstream development work).
- [Mirroring/downloading the TeX Live repository](#) (typically because you have problems with network installation, or have several machines to keep updated).

Past and future

The last general update of packages and programs for the DVD was made around 10 April 2019. However, we continuously update packages in TL as they are released to CTAN. [Post-installation updates](#) are done with the `tlmgr` program. `tlmgr` also provides many other TeX installation options and features, explained in the [tlmgr documentation](#).

Although it is *possible* to update continuously, it is not necessary or even recommended. The set of packages and programs that were included in the official release will most likely suffice unless you know that you specifically need updates made since then. That set is also the only one which gets tested as a coherent release.

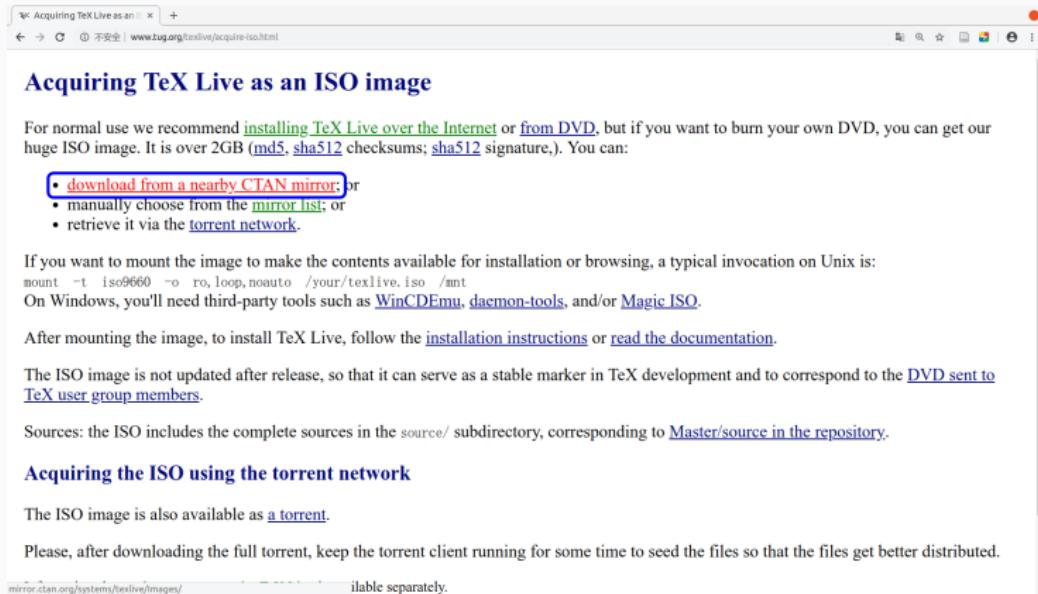
[Older releases of TeX Live](#) are available. You might find one useful if you need a release of particular vintage. There's no problem with having multiple versions of TL installed (in different directories); in fact, the default directory structure is arranged to facilitate this. After installation, just set your PATH accordingly.

www.tug.org/btexlive/acquire-iso.html

☛ 下载

☞ <http://www.tug.org/texlive/> ↗

☞ 自动选择镜像网站



The ISO image is also available as [a torrent](#).

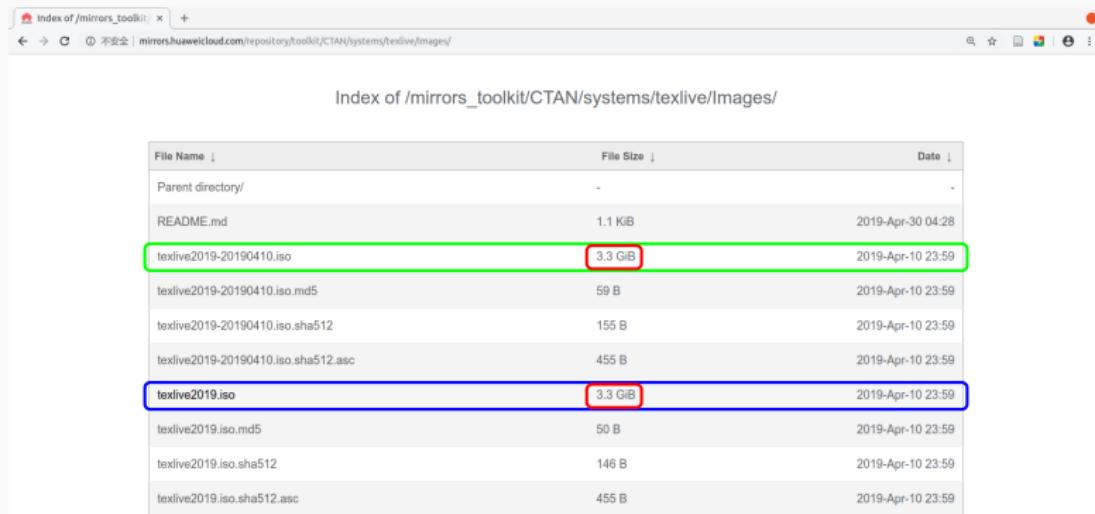
Please, after downloading the full torrent, keep the torrent client running for some time to seed the files so that the files get better distributed.

mirror.ctan.org/systems/texlive/images/ 可以分别下载。

☛ 下载

☞ <http://www.tug.org/texlive/> ↗

↙ 任选 1 个下载 (3.3GiB)

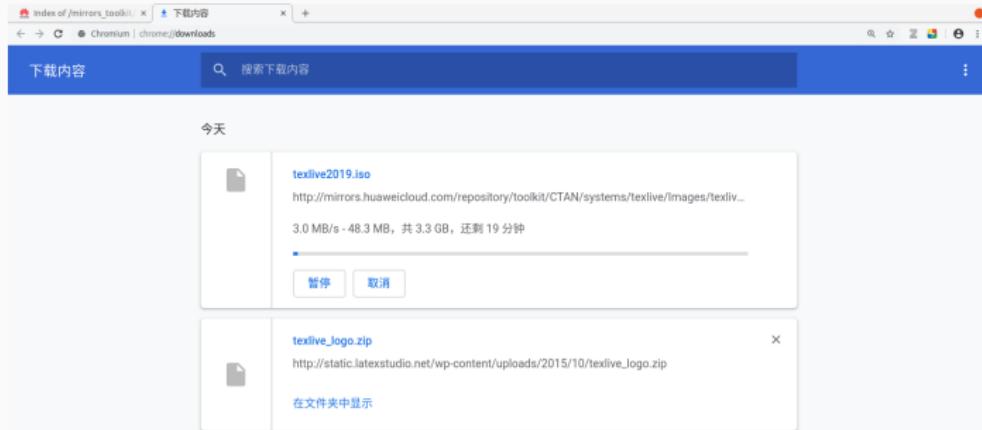


File Name ↓	File Size ↓	Date ↓
Parent directory/	-	-
README.md	1.1 KiB	2019-Apr-30 04:28
texlive2019-20190410.iso	3.3 GiB	2019-Apr-10 23:59
texlive2019-20190410.iso.md5	59 B	2019-Apr-10 23:59
texlive2019-20190410.iso.sha512	155 B	2019-Apr-10 23:59
texlive2019-20190410.iso.sha512.asc	455 B	2019-Apr-10 23:59
texlive2019.iso	3.3 GiB	2019-Apr-10 23:59
texlive2019.iso.md5	50 B	2019-Apr-10 23:59
texlive2019.iso.sha512	146 B	2019-Apr-10 23:59
texlive2019.iso.sha512.asc	455 B	2019-Apr-10 23:59

☛ 下载

☞ <http://www.tug.org/texlive/> ↗

☛ 开始下载



Downloading...

安裝 TeX Live



• 打开终端

- ☞ Windows: 右键开始菜单、空白处 $\square\uparrow$ + 右键、 $\square\boxed{\text{U}}$ + \boxed{R} & $\boxed{\text{cmd}}$
- ☞ Linux: $\boxed{\text{Ctrl}}$ + $\boxed{\text{Alt}}$ + \boxed{T}
- ☞ Mac: $\boxed{\text{⌘}}$ + $\boxed{\text{空格}}$ 搜索 Terminal、可在 Finder 中添加服务

• 基本命令:

- ☞ cd、ls/dir、rm/del、clear/cls
- ☞ 选项: -h、--help、/?

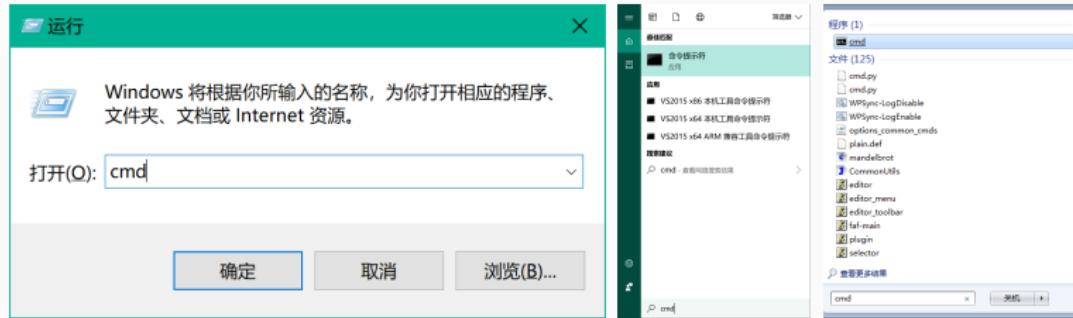
• 其他:

- ☞ 复制粘贴: $\boxed{\text{Ctrl}}/\boxed{\text{U}}$ + $\boxed{\text{Ins}}$ 、 $\boxed{\text{Ctrl}}+ \boxed{c/v}$ 、 $\boxed{\text{⌘}}+ \boxed{c/v}$
- ☞ 路径连接符: 斜线 (/) 或反斜线 (\)
- ☞ 换行符: LF ($\backslash n$) 或 CRLF ($\backslash r\backslash n$)
- ☞ 结束进程: $\boxed{\text{Ctrl}}+ \boxed{C}$

• 文件路径及命名中**不要使用**中文、空格以及特殊符号

*本页面摘自曾祥东的“现代 LATEX 入门讲座”讲义 ↗。

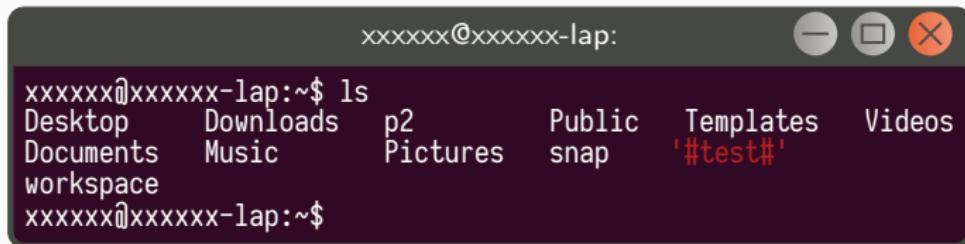
Windows 命令行窗口: **运行** + **R** / 小娜 / 开始 & **cmd**



The screenshot shows a terminal window displaying the output of the 'dir' command. The command was run from the directory 'C:\Users\Administrator\dir'. The output lists several files and folders:

```
C:\Users\Administrator\dir
2018/07/21 15:39 <DIR> .
2018/07/21 15:39 <DIR> ..
2018/07/13 08:35 <DIR> 3D Objects
2018/07/13 08:35 <DIR> Contacts
2018/07/21 15:39 <DIR> Desktop
2 个文件 6,029,312 字节
18 个目录 14,035,107,840 可用字节
```

- Ubuntu 终端窗口: **Ctrl** + **Alt** + **T**



A screenshot of a terminal window titled "xxxxxx@xxxxxx-lap:". The window has standard OS X-style close, minimize, and zoom controls. The terminal displays the command "ls" followed by a listing of directory contents: Desktop, Downloads, p2, Public, Templates, Videos, Documents, Music, Pictures, snap, and "#test#". The "#test#" entry is colored red. The prompt "xxxxxx@xxxxxx-lap:~\$" appears at the bottom.

```
xxxxxx@xxxxxx-lap:~$ ls
Desktop    Downloads    p2        Public    Templates   Videos
Documents  Music       Pictures   snap      '#test#'
workspace
xxxxxx@xxxxxx-lap:~$
```

- MacOS 终端窗口: **⌘** + **空格** 搜索 Terminal



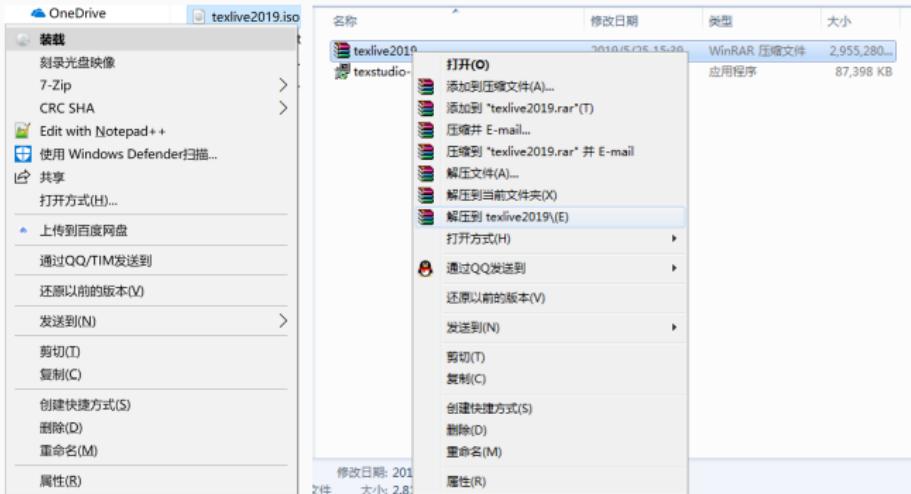
A screenshot of a terminal window titled "xxxxxx@lap:". The window has standard OS X-style close, minimize, and zoom controls. The terminal displays the command "ls" followed by a listing of directory contents: Desktop, Downloads, p2, Public, Templates, Videos, Documents, Music, Pictures, snap, and "#test#". The "#test#" entry is colored red. The prompt "xxxxxx@xxxxxx-lap:~\$" appears at the bottom.

```
xxxxxx@xxxxxx-lap:~$ ls
Desktop    Downloads    p2        Public    Templates   Videos
Documents  Music       Pictures   snap      '#test#'
workspace
xxxxxx@xxxxxx-lap:~$
```

► 加载“texlive2019.iso”文件 (推荐)

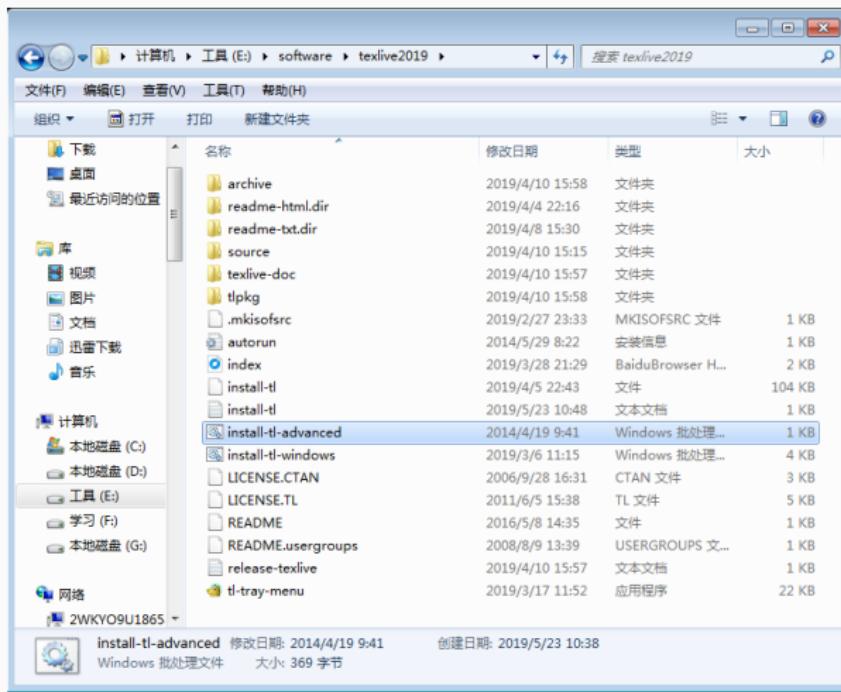
- ☞ Win10 直接装载或用虚拟光驱加载
- ☞ Win7 及其它用虚拟光驱加载

► 解压“texlive2019.iso”文件

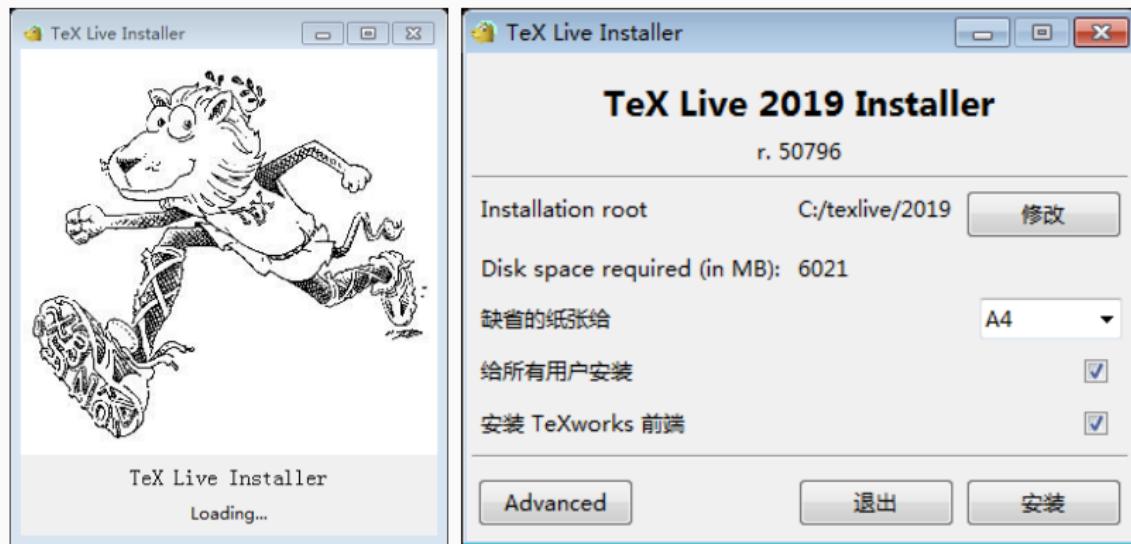


解压...

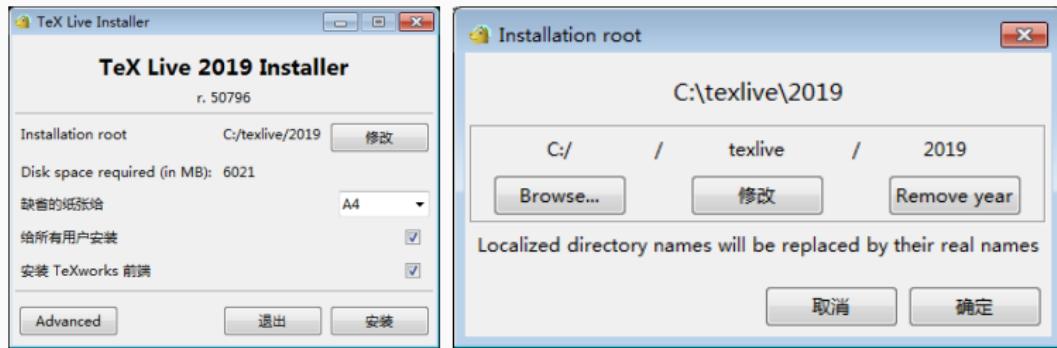
得到安装文件



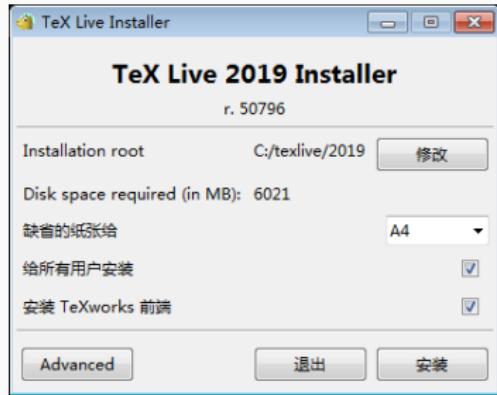
- 双击“install-tl-advanced”文件启动 TeX Live 安装



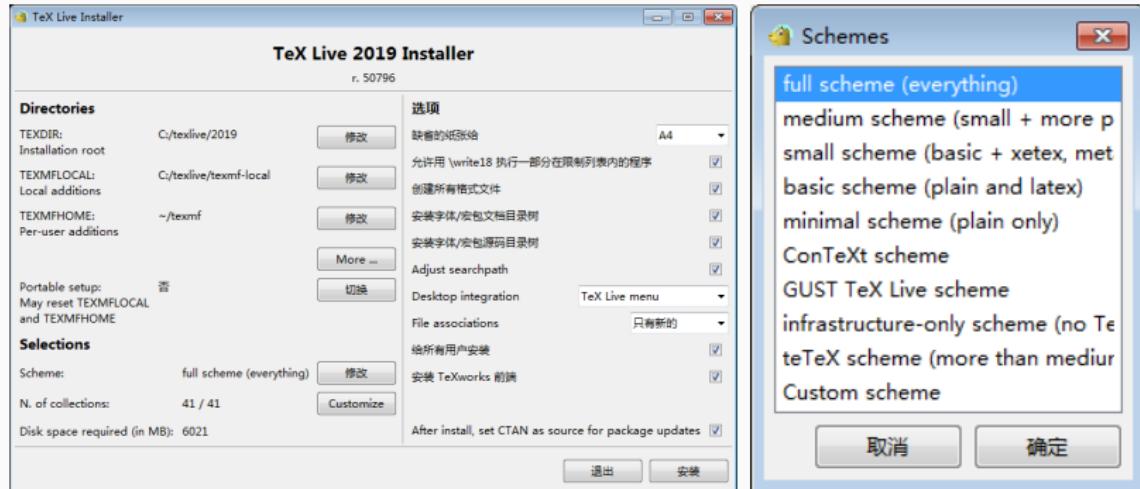
- 单击“Installation root”后的修改按钮可更改安装根目录



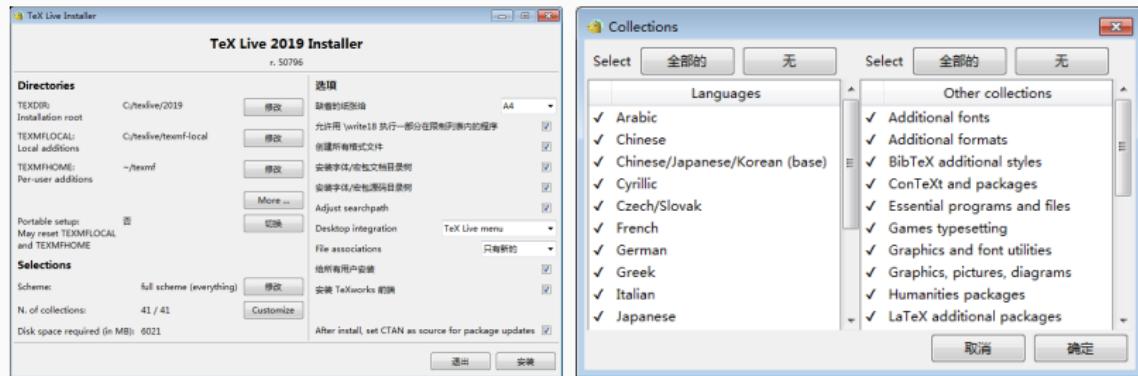
☛ 单击 Advanced 按钮可定制安装选项



单击“Scheme”后的修改按钮可选择安装方案

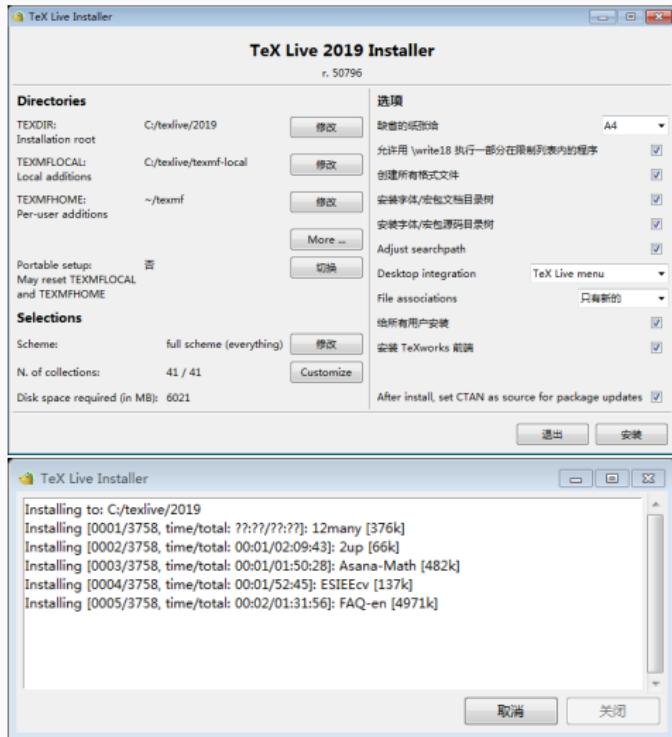


☛ 单击“collections”后的 Customize 按钮可选择安装宏包*



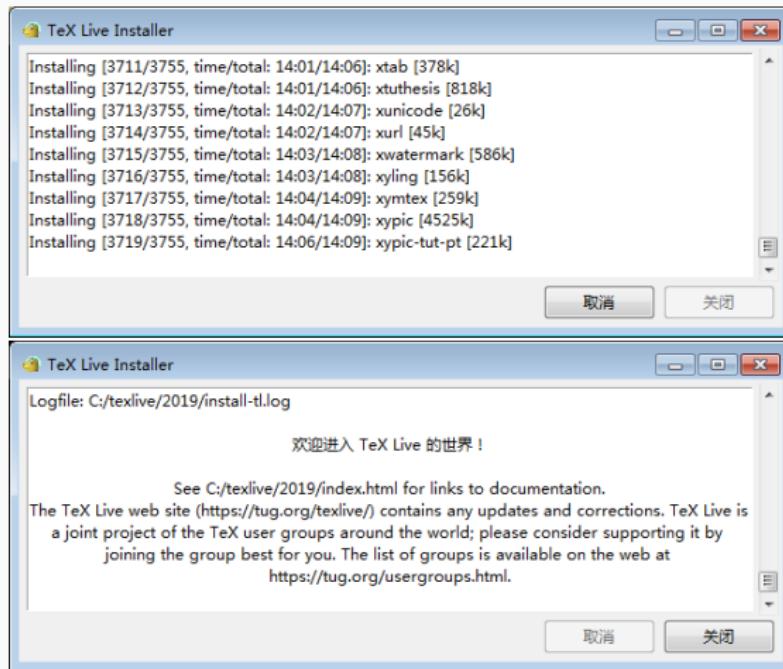
*建议完整安装宏包，以备不时之需。

- 完成定制后单击 安装 进行 TeX Live 2019 安装



安装...

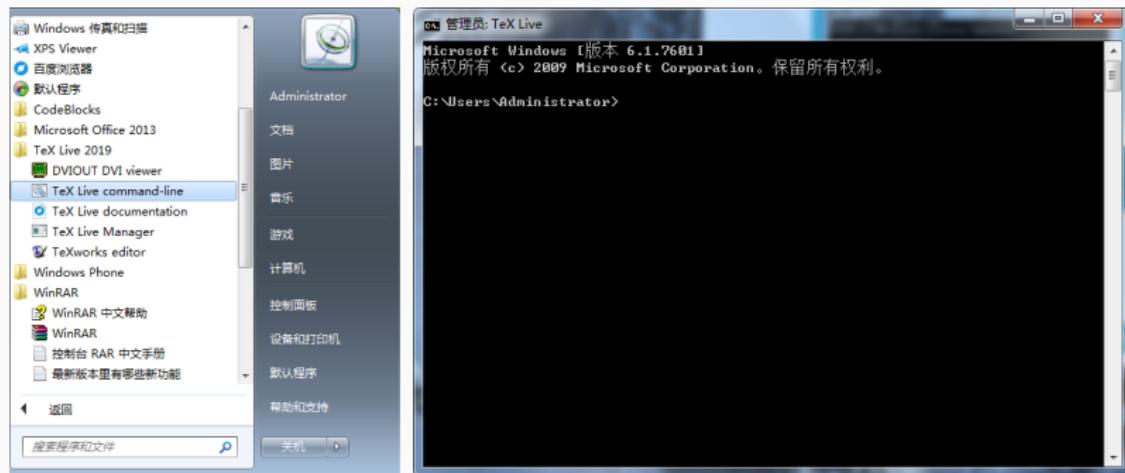
☛ 单击**关闭**完成 TeX Live 2019 安装



► TeX Live 2019 开始菜单

☞ TeX Live command-line：启动命令行

↳ 用于执行 `xelatex`、`texdoc` 等 L^AT_EX 命令



► TeX Live 2019 开始菜单

► TeX Live documentation : 文档查阅



TeX Live documentation

This document lists links to all HTML and PDF files for packages and guides contained in [TeX Live](#), sorted by package name.

[I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

[1](#)

- [1layer \(CTAN\)](#): Generalizing mathematical index sets [1layer.pdf](#)

[2](#)

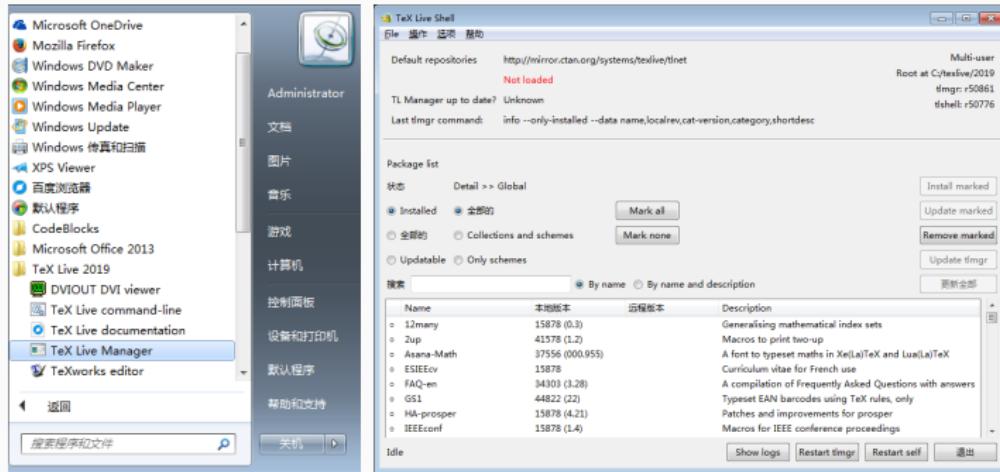
- [2up \(CTAN\)](#): Macros to print two-up [2updoc.pdf](#)

[A](#)

- [afm2ps \(CTAN\)](#): Support for designing posters on large paper [afm.pdf](#) ([de](#)) [afm_en.pdf](#)
- [adobe \(CTAN\)](#): Advanced PS, PDF, EPS converter [adobe.ps2pdf.pdf](#)
- [adobe2 \(CTAN\)](#): Adobe PDF to LaTeX converter [adobe2.pdf](#)
- [adobe3 \(CTAN\)](#): Support for all paper sizes [adobe3.pdf](#)
- [amshtx \(CTAN\)](#): Macros for Manuscript Preparation for AAS Journals [CDS20000-preconverted-to-aaf.tex](#) ([frl](#)) [aaf.tex](#) ([converted-to-aaf.tex](#)) [bbl20000-preconverted-to-aaf.tex](#) ([frl](#)) [aaf.bbl](#) ([converted-to-aaf.bbl](#))
- [abc \(CTAN\)](#): Support ABC matrix notation in LaTeX [abc.pdf](#)
- [abnt \(CTAN\)](#): Typesetting academic works according to ABNT rules [abnrt.pdf](#) ([pt-br](#)) [abnrtcite-alp.pdf](#) ([pt-br](#))
- [abntext2 \(CTAN\)](#): Typeset technical and scientific Brazilian documents based on ABNT rules [abnrt2.pdf](#) ([pt-br](#)) [abnrtcite-alp2.pdf](#) ([pt-br](#))

TeX Live 2019 开始菜单

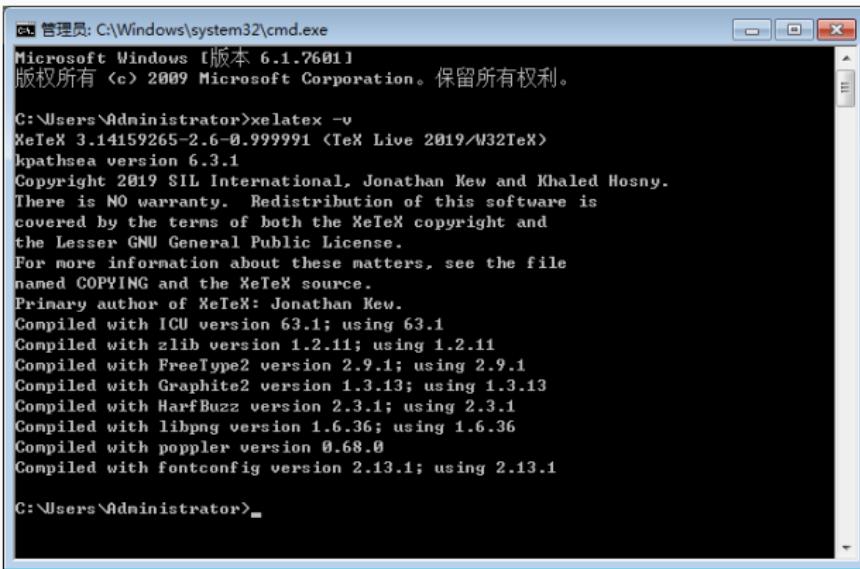
TeX Live Manager: 升级维护



☛ 检查 TeX Live 2019 是否安装成功

☛ 打开命令行，输入：xelatex -v

☛ 正常：输出**版本信息**



管理员: C:\Windows\system32\cmd.exe
Microsoft Windows [版本 6.1.7601]
版权所有 © 2009 Microsoft Corporation。保留所有权利。

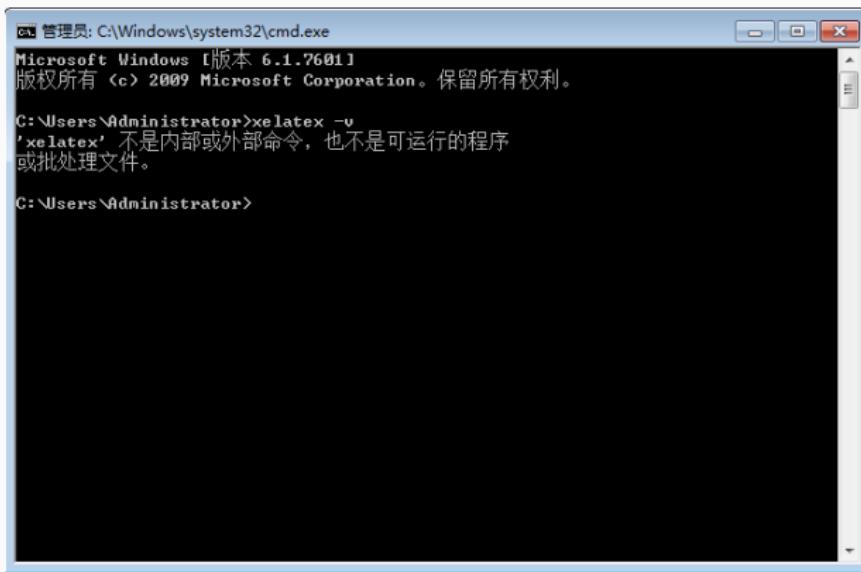
C:\Users\Administrator>xelatex -v
XeTeX 3.14159265-2.6-0.999991 <TeX Live 2019/W32TeX>
kpathsea version 6.3.1
Copyright 2019 SIL International, Jonathan Kew and Khaled Hosny.
There is NO warranty. Redistribution of this software is
covered by the terms of both the XeTeX copyright and
the Lesser GNU General Public License.
For more information about these matters, see the file
named COPYING and the XeTeX source.
Primary author of XeTeX: Jonathan Kew.
Compiled with ICU version 63.1; using 63.1
Compiled with zlib version 1.2.11; using 1.2.11
Compiled with FreeType2 version 2.9.1; using 2.9.1
Compiled with Graphite2 version 1.3.13; using 1.3.13
Compiled with HarfBuzz version 2.3.1; using 2.3.1
Compiled with libpng version 1.6.36; using 1.6.36
Compiled with poppler version 0.68.0
Compiled with fontconfig version 2.13.1; using 2.13.1

C:\Users\Administrator>

☛ 检查 TeX Live 2019 是否安装成功

☛ 打开命令行，输入：xelatex -v

☛ 错误：输出**命令错误**，一般是**环境变量**配置错误造成的



☛ 环境变量

右击桌面上“ThePC”(Win10) 或“我的电脑”(Win7)

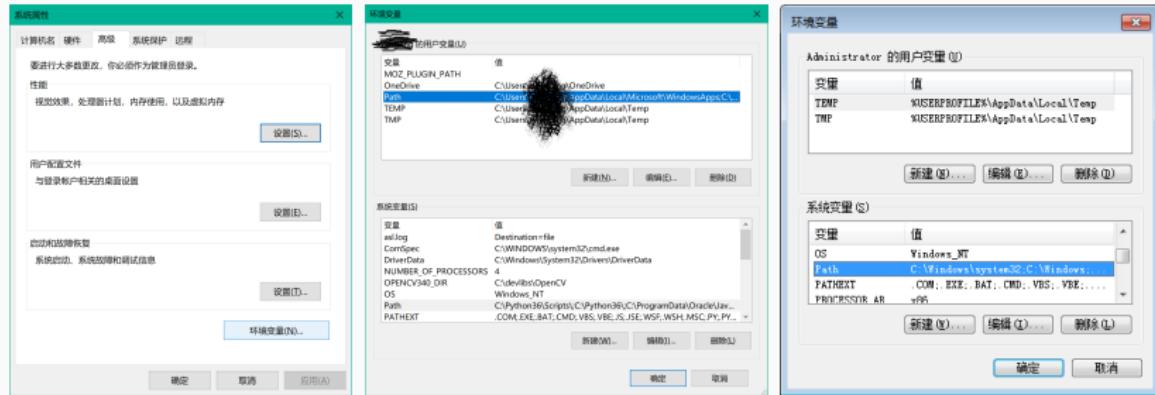
选择 **属性** 打开系统属性对话框



◆ 环境变量

环境变量对话框

- 选择**高级系统设置**打开**系统属性**对话框
- 在**系统属性**对话框中**环境变量**打开**环境变量**对话框
- 可以对**当前用户**设置，也可以对**系统用户**进行设置



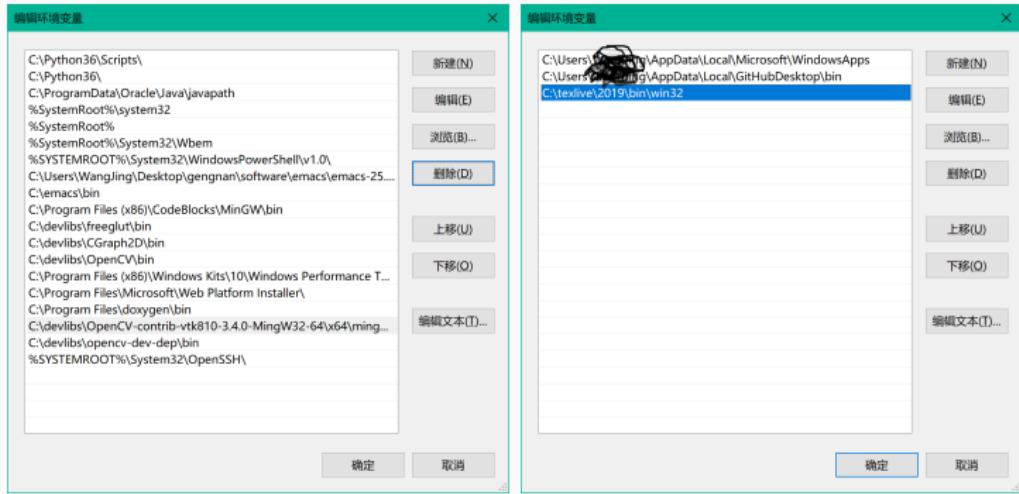
环境变量

双击“Path”环境变量进行设置 (Win10)

通过 新建 按钮创建环境变量

通过 编辑 按钮编辑环境变量

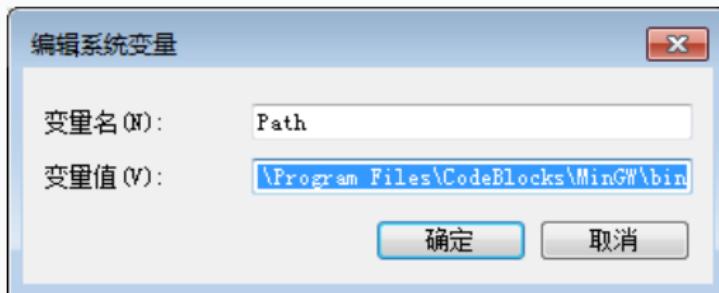
将“TeX Live 2019”的“bin”安装路径添加到环境变量



环境变量

双击“Path”环境变量进行设置 (Win7)

将“TEX Live 2019”的“bin”安装路径添加到环境变量

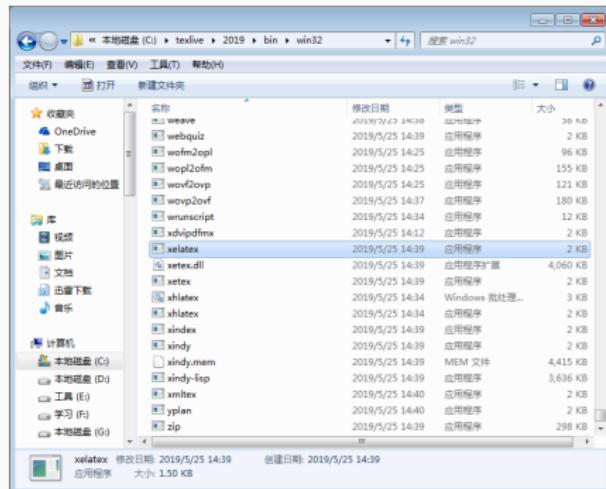


◆ 环境变量

需确保“TeX Live 2019”的“bin”路径正确

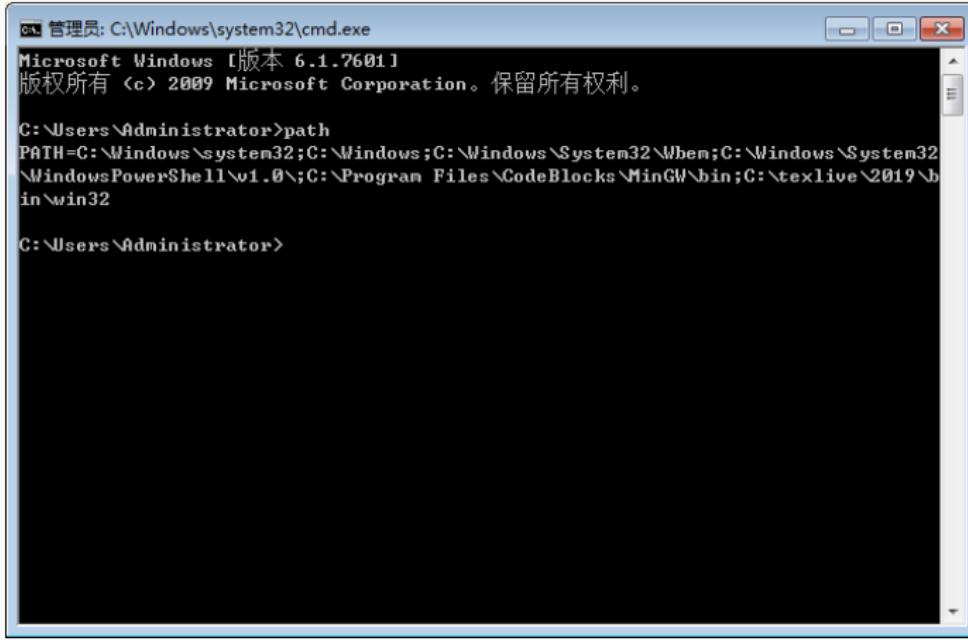
默认：C:\texlive\2019\bin\win32

“xelatex.exe”等可执行文件所在的路径



◆ 环境变量

也可以在命令行用“path”命令查看环境变量



```
管理员: C:\Windows\system32\cmd.exe
Microsoft Windows [版本 6.1.7601]
版权所有 <c> 2009 Microsoft Corporation。保留所有权利。

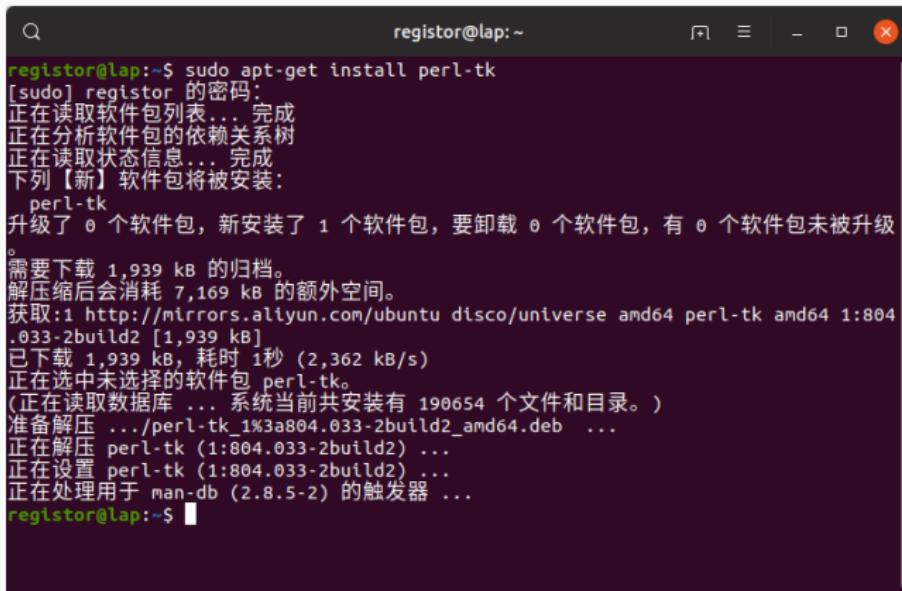
C:\Users\Administrator>path
PATH=C:\Windows\system32;C:\Windows;C:\Windows\System32\WBEM;C:\Windows\System32\WindowsPowerShell\v1.0\;C:\Program Files\CodeBlocks\MinGW\bin;C:\texlive\2019\bin\win32

C:\Users\Administrator>
```

如果环境变量正确，还无法执行“`xelatex -v`”，
那就重装 `TeX Live 2019` 吧！

- 图形化安装界面需安装“perl”的“tk”组件

- 打开终端: **[Ctrl]+[Alt]+[T]**
- 执行: `sudo apt-get install perl-tk`

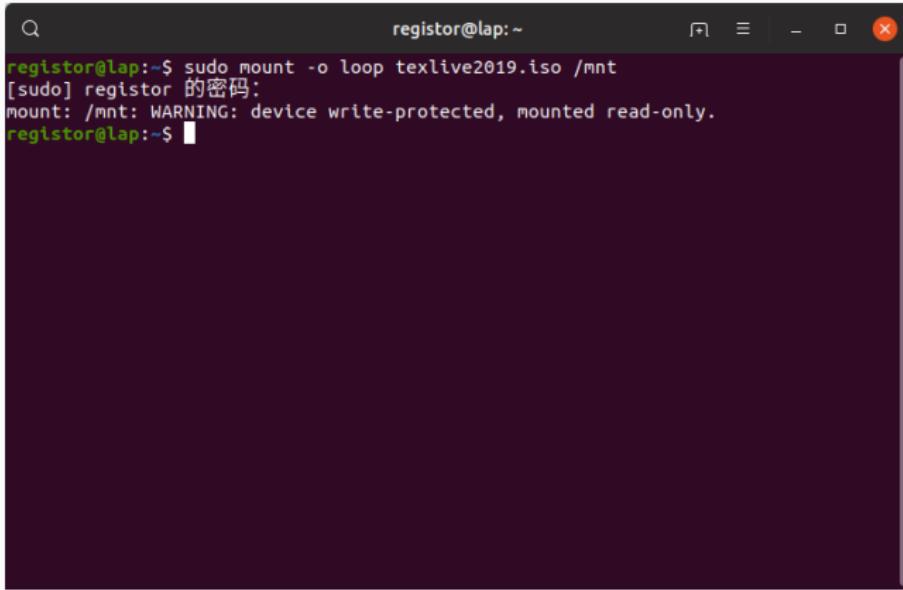


register@lap:~\$ sudo apt-get install perl-tk
[sudo] register 的密码:
正在读取软件包列表... 完成
正在分析软件包的依赖关系树
正在读取状态信息... 完成
下列 [新] 软件包将被安装：
perl-tk
升级了 0 个软件包，新安装了 1 个软件包，要卸载 0 个软件包，有 0 个软件包未被升级。
需要下载 1,939 kB 的归档。
解压缩后会消耗 7,169 kB 的额外空间。
获取:1 http://mirrors.aliyun.com/ubuntu disco/universe amd64 perl-tk amd64 1:804.033-2build2 [1,939 kB]
已下载 1,939 kB，耗时 1秒 (2,362 kB/s)
正在选中未选择的软件包 perl-tk。
(正在读取数据库 ... 系统当前共安装有 190654 个文件和目录。)
准备解压 .../perl-tk_1%3a804.033-2build2_amd64.deb ...
正在解压 perl-tk (1:804.033-2build2) ...
正在设置 perl-tk (1:804.033-2build2) ...
正在处理用于 man-db (2.8.5-2) 的触发器 ...
register@lap:~\$

➥ 加载“texlive2019.iso”镜像文件

➥ 打开终端: **[Ctrl]+[Alt]+[T]**

➥ 执行: `sudo mount -o loop texlive2019.iso /mnt`



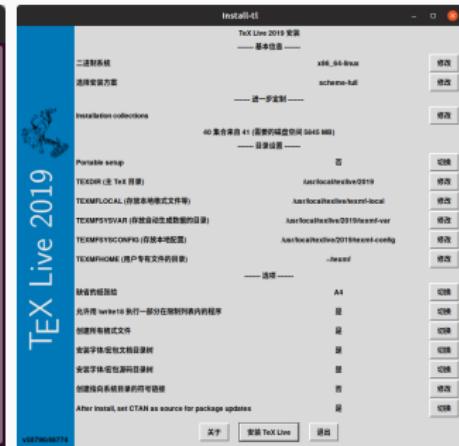
A screenshot of a terminal window titled "register@lap:~". The terminal shows the following command being run:

```
register@lap:~$ sudo mount -o loop texlive2019.iso /mnt
[sudo] register 的密码:
mount: /mnt: WARNING: device write-protected, mounted read-only.
register@lap:~$
```

☛ 启动 TeX Live 2019 图形化安装界面

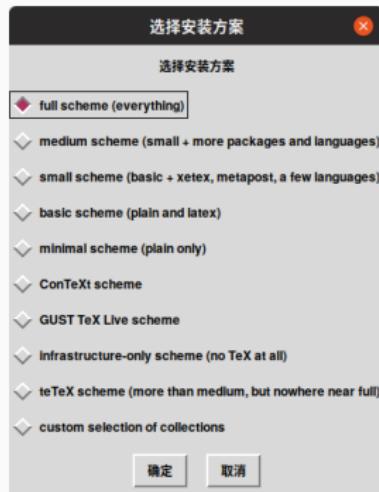
- ☛ 打开终端: **[Ctrl]+[Alt]+[T]**
- ☛ 执行: **cd /mnt**
- ☛ 执行: **sudo ./install-tl -gui**

```
register@lap:~$ sudo mount -o loop texlive2019.iso /mnt
[sudo] register 的密码:
mount: /mnt: WARNING: device write-protected, mounted read-only.
register@lap:~$ cd /mnt
register@lap:/mnt$ sudo ./install-tl -gui
Can't exec 'wish': 没有那个文件或目录 at ./install-tl line 89.
Can't exec 'wsh8.6': 没有那个文件或目录 at ./install-tl line 89.
Can't exec 'wsh8.5': 没有那个文件或目录 at ./install-tl line 89.
Can't exec 'tclkit': 没有那个文件或目录 at ./install-tl line 89.
Setting opt_gui to perlTk instead at ./install-tl line 350.
Loading ./tlpkgs/texlive.tlpdb
Installing TeX Live 2019 from: . (verified)
Platform: x86_64-linux => 'GNU/Linux on x86_64'
Distribution: inst (compressed)
Directory for temporary files: /tmp/h0lpsGEKsE
```



► 选择 TeX Live 2019 安装方案及宏包组件*

☞ 使用 **修改** 按钮选择不同安装选项



*建议全部安装，以备不时之需。

- 选择 T_EX Live 2019 安装方案及宏包组件
 - 可以更改安装路径
 - 注意创建**指向系统目录的符号链接***



* 否则无法正确执行各个编译命令。

☛ 选择 TeX Live 2019 安装方案及宏包组件

☞ 确认无误后，单击 **安装 TeX Live** 进行安装

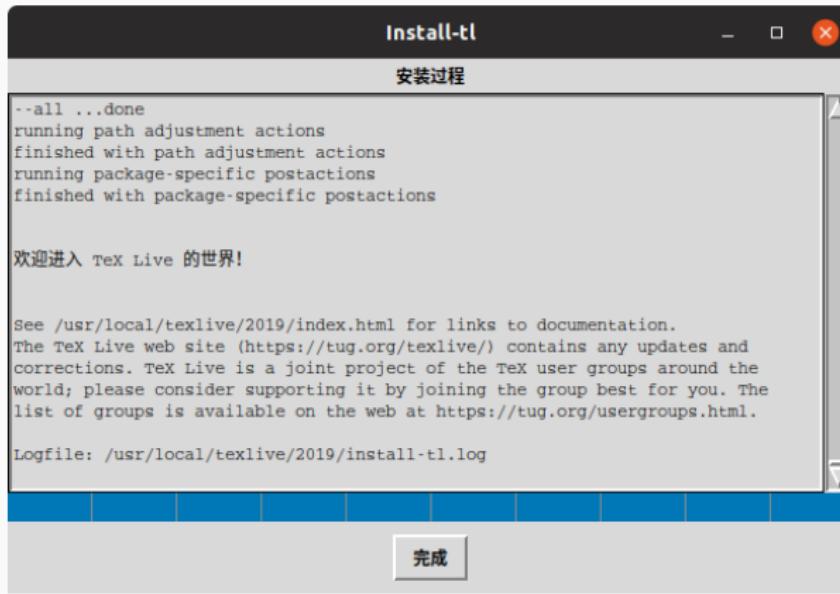


安装...

☛ 安装结束

☛ 单击 **完成**

☛ 卸载镜像文件: `cd /; sudo umount /mnt`

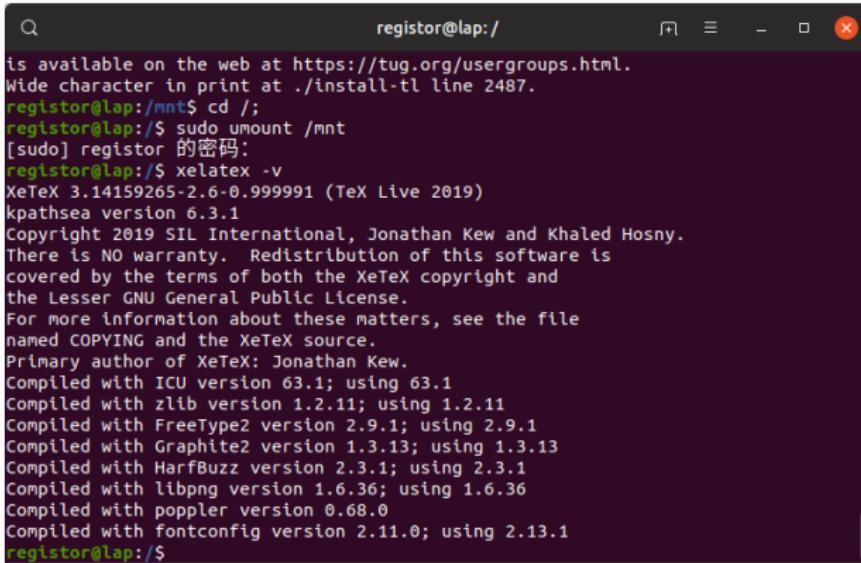


☛ 检查 TeX Live 2019 是否安装成功

☞ 打开终端: **Ctrl + Alt + T**

☞ 输入命令: **xelatex -v**

☛ 正常: 输出**版本信息**



```
register@lap:/
```

```
is available on the web at https://tug.org/usergroups.html.
Wide character in print at ./install-tl line 2487.
register@lap:/mnt$ cd /;
register@lap:/$ sudo umount /mnt
[sudo] register 的密码:
register@lap:/$ xelatex -v
XeTeX 3.14159265-2.6-0.999991 (TeX Live 2019)
kpftsea version 6.3.1
Copyright 2019 SIL International, Jonathan Kew and Khaled Hosny.
There is NO warranty. Redistribution of this software is
covered by the terms of both the XeTeX copyright and
the Lesser GNU General Public License.
For more information about these matters, see the file
named COPYING and the XeTeX source.
Primary author of XeTeX: Jonathan Kew.
Compiled with ICU version 63.1; using 63.1
Compiled with zlib version 1.2.11; using 1.2.11
Compiled with FreeType2 version 2.9.1; using 2.9.1
Compiled with Graphite2 version 1.3.13; using 1.3.13
Compiled with HarfBuzz version 2.3.1; using 2.3.1
Compiled with libpng version 1.6.36; using 1.6.36
Compiled with poppler version 0.68.0
Compiled with fontconfig version 2.11.0; using 2.13.1
register@lap:/$
```

如果无法执行“`xelatex -v`”，那就重装 \TeX Live 2019 吧！
特别要注意的是 **创建符号链接**！

更新 T_EX Live



☛ 执行“tlmgr”更新 T_EX Live 2019

- ☛ 打开命令行
- ☛ 输入命令: tlmgr update --self --all (Windows) *
- ☛ 输入命令: sudo tlmgr update --all (Ubuntu)

```
C:\Users\Administrator>tlmgr update --self --all
tlmgr.pl: package repository http://mirror.lzu.edu.cn/CTAN/systems/texlive/tlnet
<not verified: gpg unavailable>
tlmgr.pl: saving backups to C:/texlive/2019/tlpkg/backups
[ 1/226] auto-remove: mathalfa ... done
[ 2/226, ??/?/???] update: Asana-Math [662k] (37556 -> 50999) ... done
[ 3/226, 00:03:39:01] update: IEEETran [1564k] (30238 -> 51065) ... done
[ 4/226, 00:03:40:13] update: acmrt [3949k] (56662 -> 51081) ... done
[ 5/226, 00:03:40:15] update: l3pnewfont [1863k] (44094 -> 51210) ... done
[ 6/226, 00:11:23:06] update: altfranc [963k] (23385 -> 51285) ... done
[ 7/226, 00:11:23:06] update: altgreek [963k] (23385 -> 51285) ... done
[ 8/226, 00:15:09:50] update: archaeologie [1131k] (48763 -> 50908) ... done
[ 9/226, 00:17:10:02] update: azmcnf [316k] (508845 -> 50967) ... done
[ 10/226, 00:21:12:03] update: babel [1410k] (50741 -> 50977) ... done
[ 11/226, 00:25:12:48] update: backnaur [232k] (28513 -> 51001) ... done
```

```
register@lap:/$ sudo tlmgr update --all
tlmgr: package repository http://mirrors.tuna.tsinghua.edu.cn/CTAN/systems/texlive/tlnet (verified)
tlmgr: saving backups to /usr/local/texlive/2019/tlpkg/backups
[ 1/227] auto-remove: mathalfa ... done
[ 2/227, ???/?/????] update: Asana-Math [662k] (37556 -> 50999) ... done
[ 3/227, 00:03:19:22] update: IEEETran [564k] (30239 -> 51081) ... done
[ 4/227, 00:03:20:12] update: acmrt [3949k] (56663 -> 51081) ... done
[ 5/227, 00:03:20:25] update: l3pnewfont [1863k] (44078 -> 51210) ... done
[ 6/227, 00:08:07:29] update: altfranc [963k] (23385 -> 51285) ... done
[ 7/227, 00:09:08:14] update: altgreek [963k] (23385 -> 51285) ... done
[ 8/227, 00:12:17:30] update: archaeologie [1131k] (48763 -> 50908) ... done
[ 9/227, 00:14:07:50] update: azmcnf [316k] (50845 -> 50967) ... done
[ 10/227, 00:16:08:52] update: babel [1410k] (50741 -> 50977) ... done
[ 11/227, 00:17:08:23] update: backnaur [232k] (28513 -> 51081) ... done
[ 12/227, 00:19:09:13] update: baskervillef [1248k] (49084 -> 51121) ... done
[ 13/227, 00:21:09:10] update: beamer-rl [183k] (50643 -> 50970) ... done
[ 14/227, 00:22:09:38] update: beebe [633k] (50834 -> 51168) ... done
[ 15/227, 00:23:09:39] update: bib2gls [7071k] (49293 -> 51088) ... done
[ 16/227, 00:28:08:02] update: biblatex-publist [327k] (50088 -> 50989) ... done
[ 17/227, 00:29:08:12] update: bidi [3858k] (50218 -> 50916) ... done
[ 18/227, 00:32:07:44] update: braids [670k] (23790 -> 51048) ... done
[ 19/227, 00:34:08:00] update: brandts-problemlset [152k] (50737 -> 50991) ... done
```

*--self 用于更新 tlmgr 自身，也可以根据提示选择是否需要 --self 参数。

更新...

☛ 执行“tlmgr”更新 TeX Live 2019

☞ 将 TeX Live 2019 更新到最新版永远是较好的选择

```
管理员: Tex Live
c:\> tlmgr update -u
done running fntutil-sys --no-error-if-no-engine=luajittex,mflua JIT --byhyphen "language.dat.lua".
tlmgr: package log updated: C:/texlive/2019/texmf-var/web2c/tlmgr.log

C:\> pdflatex -v
TeX-K 3.14159265-2.6-0.999991 (TeX Live 2019/W32TeX)
kpfonts version 6.3.i
Copyright 2019 SIL International, Jonathan Kew and Khaled Hosny.
There is NO warranty. Redistribution of this software is
covered by the terms of both the TeXFEX copyright and
the GNU General Public License.
For more information about these matters, see the file
named COPYING and the TeXFEX source.
Primary author of TeXFEX: Jonathan Kew.
Compiled with ICU version 63.1: using 63.1
Compiled with zlib version 1.2.11: using 1.2.21
Compiled with FreeType2 version 2.9.1: using 2.9.1
Compiled with Graphite2 version 1.3.13: using 1.3.13
Compiled with HarfBuzz version 2.3.1: using 2.3.1
Compiled with libpng version 1.6.36: using 1.6.36
Compiled with poppler version 0.68.0
Compiled with fontconfig version 2.13.1: using 2.13.1
C:\>
```

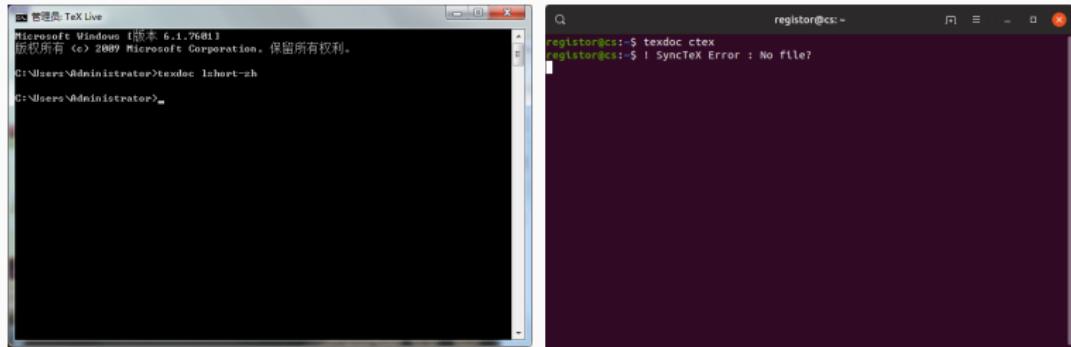
```
register@lap:/home/register
register@lap:/home/register$ tlmgr update -u
done running fntutil-sys --no-error-if-no-engine=luajittex,mflua JIT --no-error-lf-no-format --byengine euptex.
running fntutil-sys --no-error-if-no-engine=luajittex,mflua JIT --no-error-lf-no-format --byengine eptex ...
done running fntutil-sys --no-error-if-no-engine=luajittex,mflua JIT --no-error-lf-no-format --byengine eptex.
running fntutil-sys --no-error-if-no-engine=luajittex,mflua JIT --no-error-lf-no-format --byengine aleph ...
done running fntutil-sys --no-error-if-no-engine=luajittex,mflua JIT --no-error-lf-no-format --byengine aleph.
running fntutil-sys --no-error-if-no-engine=luajittex,mflua JIT --byhyphen "/usr/local/texlive/2019/texmf-var/tex/generic/config/language.dat" ...
done running fntutil-sys --no-error-if-no-engine=luajittex,mflua JIT --byhyphen "/usr/local/texlive/2019/texmf-var/tex/generic/config/language.dat",
running fntutil-sys --no-error-if-no-engine=luajittex,mflua JIT --byhyphen "/usr/local/texlive/2019/texmf-var/tex/generic/config/language.def" ...
done running fntutil-sys --no-error-if-no-engine=luajittex,mflua JIT --byhyphen "/usr/local/texlive/2019/texmf-var/tex/generic/config/language.def".
running fntutil-sys --no-error-if-no-engine=luajittex,mflua JIT --byhyphen "/usr/local/texlive/2019/texmf-var/tex/generic/config/language.dat.lua" ...
done running fntutil-sys --no-error-if-no-engine=luajittex,mflua JIT --byhyphen "/usr/local/texlive/2019/texmf-var/tex/generic/config/language.dat.lua".
tlmgr: package log updated: /usr/local/texlive/2019/texmf-var/web2c/tlmgr.log
register@lap:/home/register$
```

查看文档



- 在命令执行“texdoc 宏包/文档名称”

- 自动打开 PDF 阅读器查看
- 查看 TeX Live 2019 使用说明，如：texdoc texlive-zh-cn
- 查看 LATEX 学习手册，如：texdoc lshort-zh
- 查看宏包使用说明，如：texdoc ctex
- 支持模糊查询



安裝 TeXstudio



► 在 TeXstudio 官网下载 ↗



The screenshot shows the 'Download' section of the TeXstudio website for Windows. It lists two options:

Platform	Version	Type	Size	How to Install
Vista/XP/7/8/10	2.12.16	Installer	~100MB	Download and double click on the installer exe
Vista/7/8/10	2.12.16	Portable	~1.4GB	Download and unzip the zip

Below this, there's a note about Linux distributions and a link to the Linux AppImage section.

The screenshot shows the 'Download' section of the TeXstudio website for Linux. It lists three options:

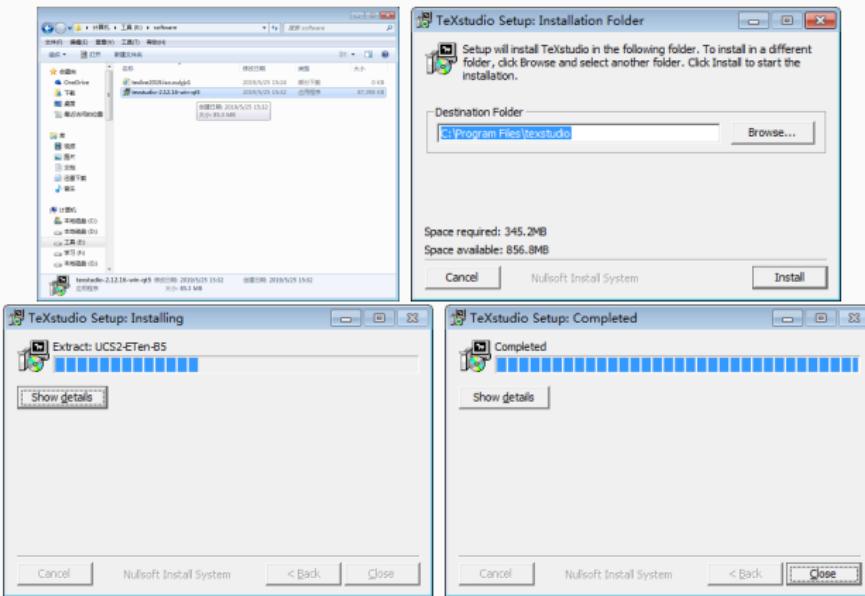
Platform	Version	Type	Size	How to Install
Gentoo Linux	2.12.16	AppImage	~12.7 MB	Download and run it with your package manager
Mac OS X	2.12.16	AppImage	~12.7 MB	Download and run it with your package manager
OS/2	2.12.4	Tar	~12.2 MB	Download, extract and start it.

Below this, there's a note about Gentoo Linux packages and a link to the Source Code section.

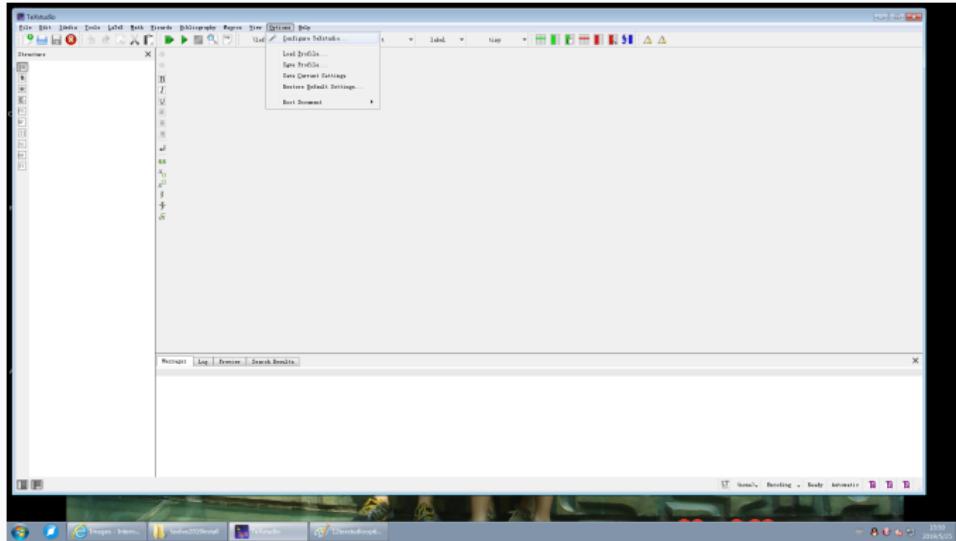
- 与通用软件安装过程一致

- 双击“texstudio-2.12.16-win-qt5”启动安装

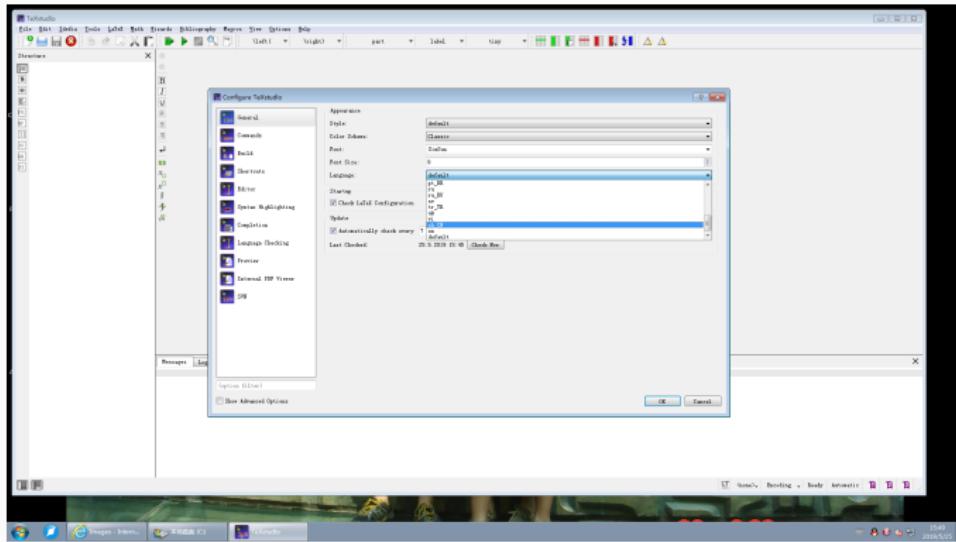
- 点击 **Install** 直至 **Close**



- 通过 Options > Configure TeXstudio... 菜单设置 TeXstudio

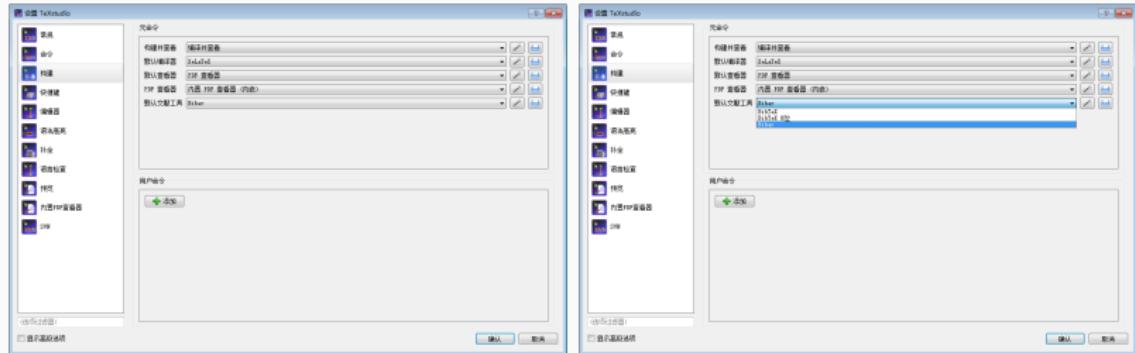


- 通过 Options > Configure TeXstudio... 菜单设置 TeXstudio
 - 通过将 Language 设置为“zh_CN”设置中文界面



通过 **选项 > 设置 TeXstudio...** 菜单设置 TeXstudio

- 将 **构建 > 默认编译器** 设置为 “**XeLaTeX**” 以支持中文 L^AT_EX 文档*
- 将 **构建 > 默认文献工具** 根据需要设置为 “**BibTeX/Biber**”[†]



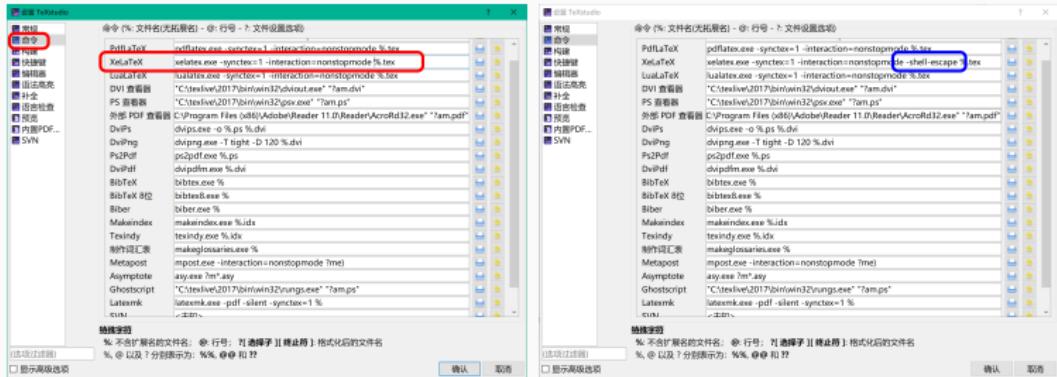
* 当有图、表、公式等交叉引用时，需要执行至少两次 XeLaTeX 编译。

[†] 当有文献交叉引用时，需要执行 XeLaTeX 后执行文献编译后再执行两次 XeLaTeX 编译，多次编译才能得到正确输出结果。

通过【选项】>【设置 TexStudio...】菜单设置 TexStudio

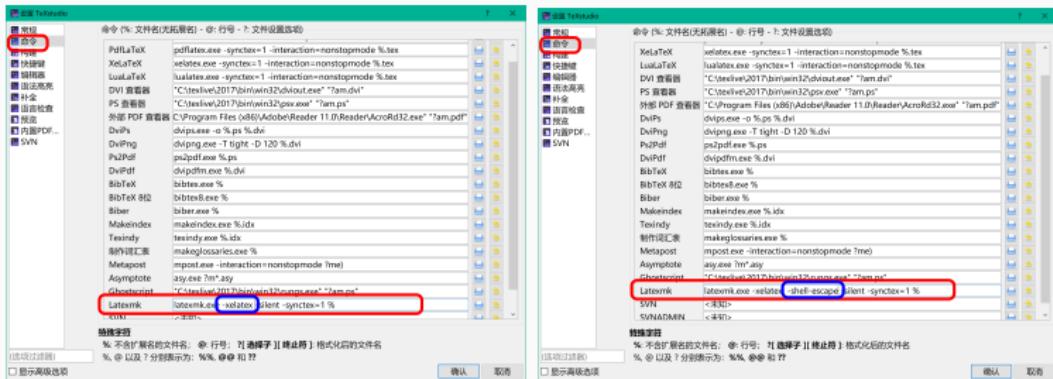
通过【命令】>【XeLaTeX】可设置编译参数

若使用“minted”代码排版等宏包，请添加 -shell-escape 编译参数



通过 **选项 > 设置 Texstudio...** 菜单设置 Texstudio

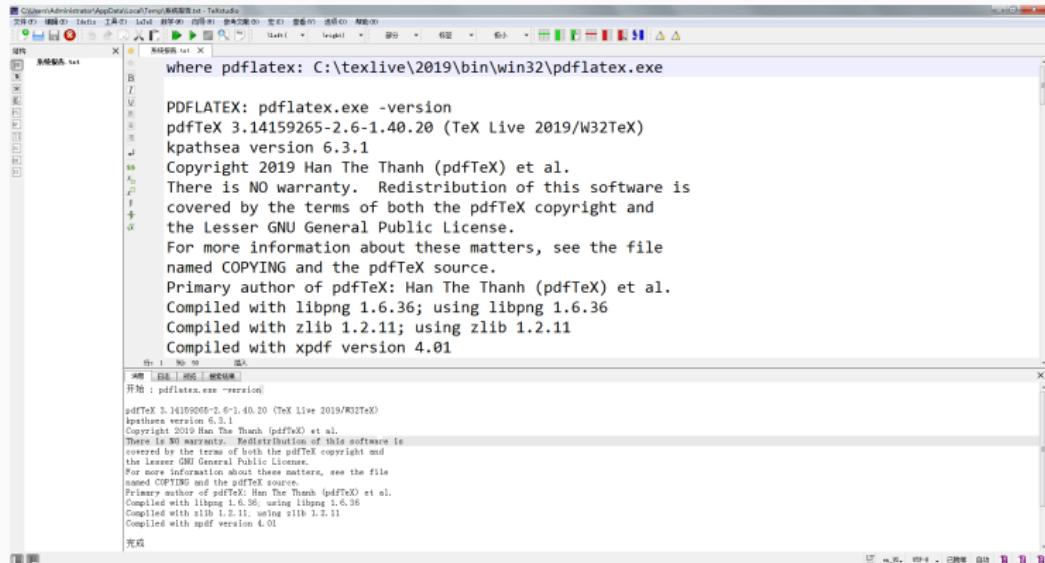
- 将 **构建 > 默认编译器** 设置为 “**Latexmk**” 实现 1 次性编译[†]
- 需将 **命令 > Latexmk** 的 -pdf 参数修改为 -xelatex 以支持中文
- 也可以为 **命令 > Latexmk** 添加 -shell-escape 编译参数



[†] 执行 1 次 Latexmk 编译，完成图、表、公式、文献等交叉引用，得到正确输出结果。

☛ 通过帮助 > 检查 L^AT_EX 安装信息... 检查

若能正确输出**系统报告**，则表示 TeX Live 2019 能正常工作



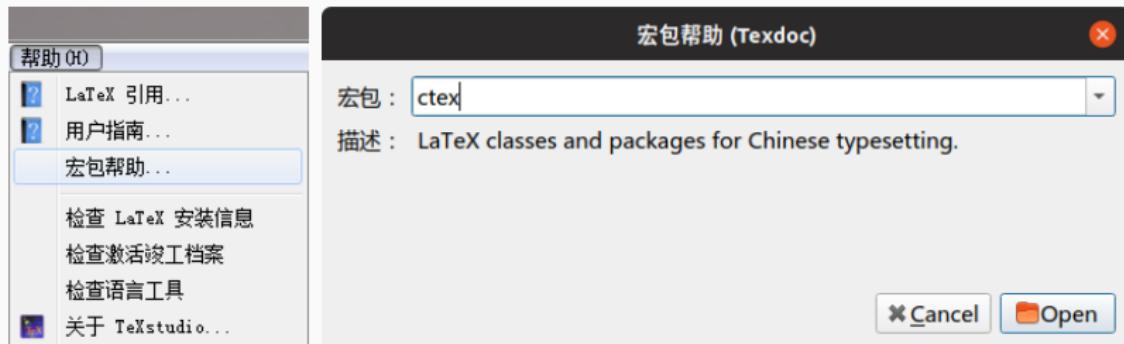
```
where pdflatex: C:\texlive\2019\bin\win32\pdflatex.exe
PDFLATEX: pdflatex.exe -version
pdfTeX 3.14159265-2.6-1.40.20 (TeX Live 2019/W32TeX)
kpftex version 6.3.1
Copyright 2019 Han The Thanh (pdfTeX) et al.
There is NO warranty. Redistribution of this software is
covered by the terms of both the pdfTeX copyright and
the Lesser GNU General Public License.
For more information about these matters, see the file
named COPYING and the pdfTeX source.
Primary author of pdfTeX: Han The Thanh (pdfTeX) et al.
Compiled with libpng 1.6.36; using libpng 1.6.36
Compiled with zlib 1.2.11; using zlib 1.2.11
Compiled with xpdf version 4.01

开始 : pdflatex.exe -version
pdfTeX 3.14159265-2.6-1.40.20 (TeX Live 2019/W32TeX)
kpftex version 6.3.1
Copyright 2019 Han The Thanh (pdfTeX) et al.
There is NO warranty. Redistribution of this software is
covered by the terms of both the pdfTeX copyright and
the Lesser GNU General Public License.
For more information about these matters, see the file
named COPYING and the pdfTeX source.
Primary author of pdfTeX: Han The Thanh (pdfTeX) et al.
Compiled with libpng 1.6.36; using libpng 1.6.36
Compiled with zlib 1.2.11; using zlib 1.2.11
Compiled with xpdf version 4.01

完成
```

通过**帮助 > 宏包帮助...**检索并查看宏包文档 *

输入需要检索并查看的**宏包名称**



*本质上执行的是“texdoc”命令，建议使用命令行操作，会更加方便。

Mac 平台



☛ 下载

☞ <http://www.tug.org/mactex/> ↞

☞ 单击 MacTeX 下载链接

The screenshot shows a web browser window with the URL <http://www.tug.org/mactex/mactex-download.html>. The page features the MacTeX logo (two cartoon characters) and the TUG logo (TeX Users Group). Navigation links include TWG, MacTeX, Donate, FAQ, Fonts, Help, References, Support, Acknowledgments, and TUG. A prominent section titled "Downloading MacTeX 2019" contains instructions: "To obtain the distribution, click the link below. While downloading, please skim read the rest of the page. Users who run into trouble often write us without noticing that the solution is on this very page." Below this is a note about system requirements: "MacTeX-2019 requires macOS 10.12, 10.13, or 10.14 Sierra, High Sierra, or Mojave". A red box highlights the download link "MacTeX.pkg". At the bottom, there is MD5 information and a recommendation to download with Safari.

To obtain the distribution, click the link below.
While downloading, please skim read the rest of the page.
Users who run into trouble often write us without noticing that the solution is on this very page.

MacTeX-2019 requires macOS 10.12, 10.13, or 10.14
Sierra, High Sierra, or Mojave

MacTeX.pkg

[approximately 3.9G - 08 May 2019]
The md5 sum is 927a9bcd8864789c7f33d8d01f8eb8c9
Download with Safari strongly recommended

☛ 下载

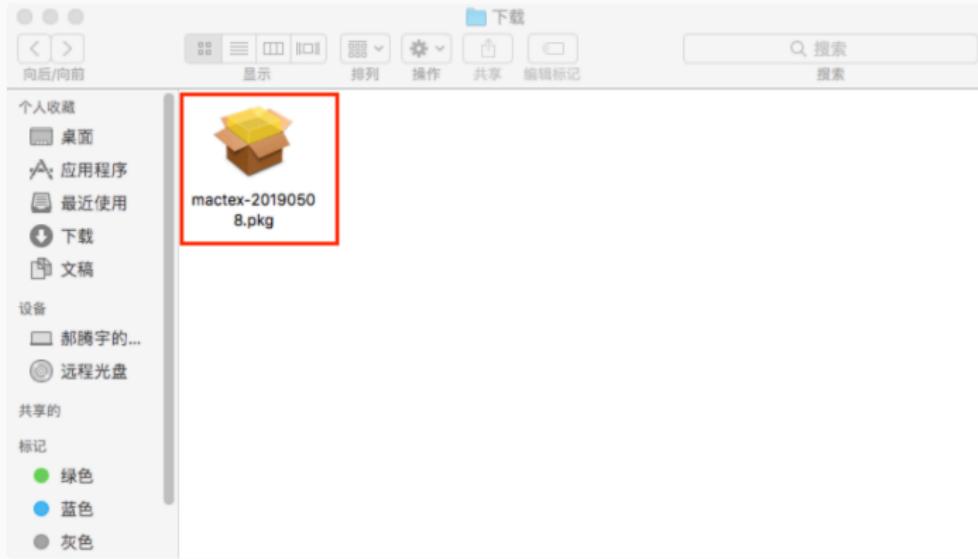
☞ <http://www.tug.org/mactex/> ↗

↗ 开始下载



Downloading...

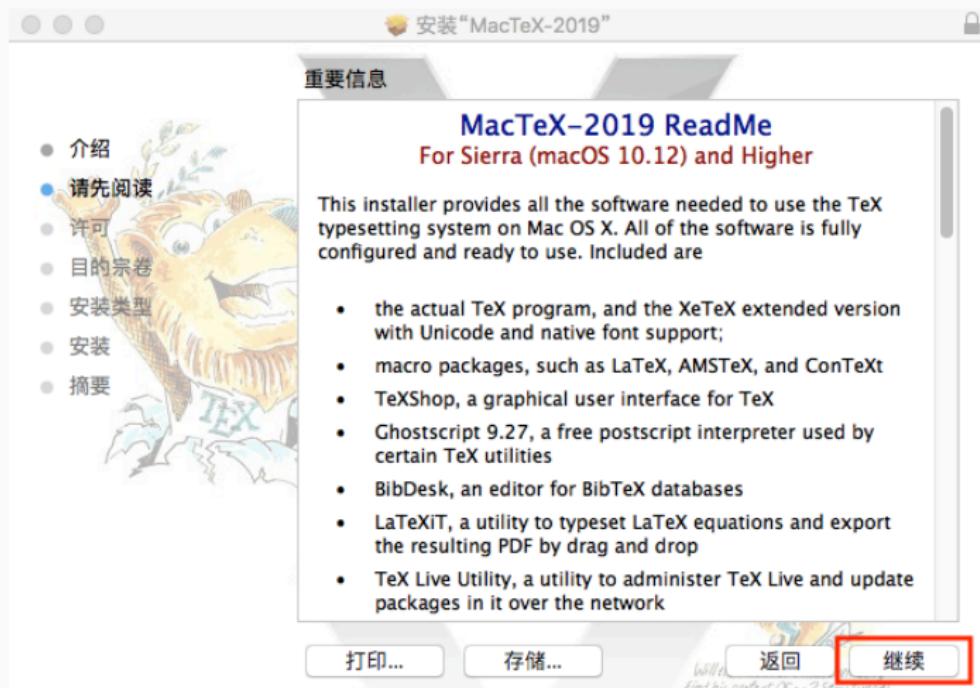
► 点击下载的 pkg 文件



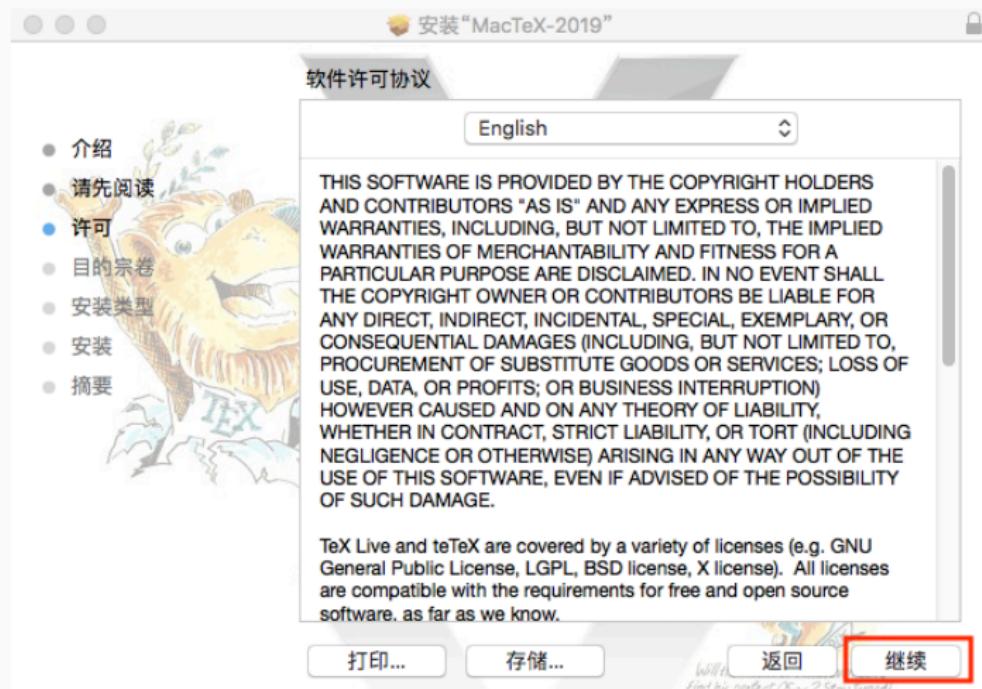
◀ 点击继续



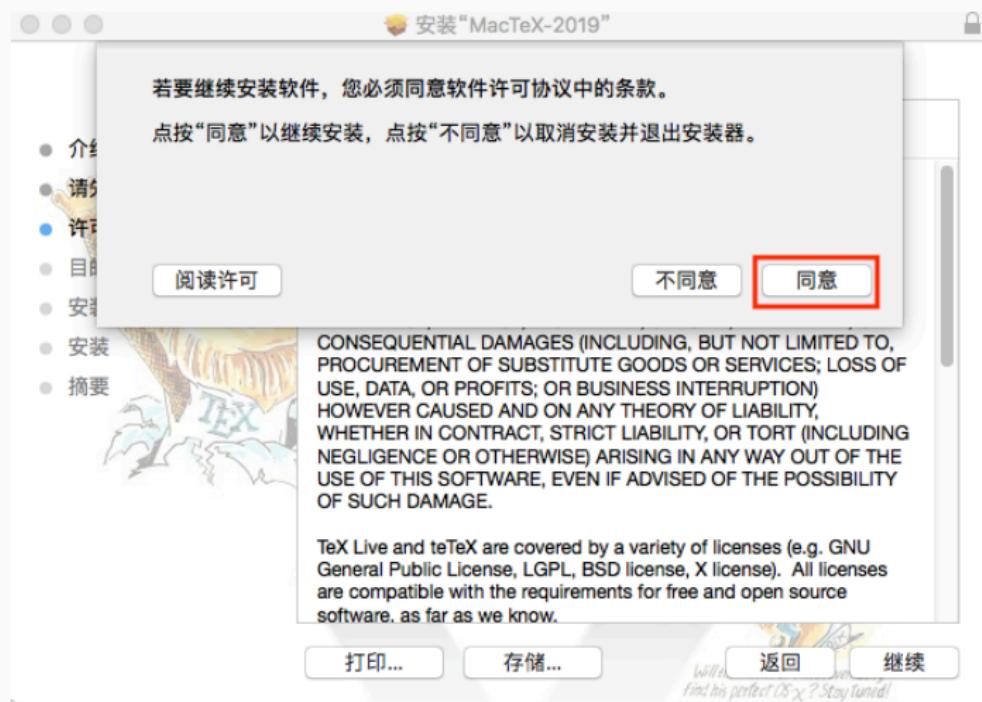
← 点击继续



← 点击继续



点击同意



◀ 点击继续

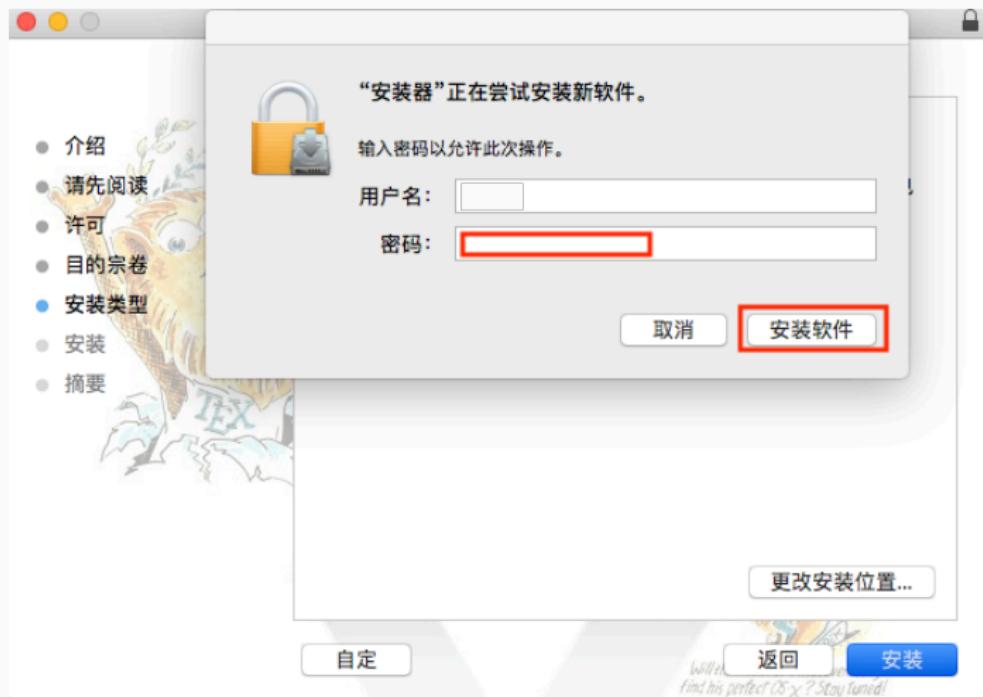


◆ 点击安装



输入密码

安装软件



正在安装



► 安装成功

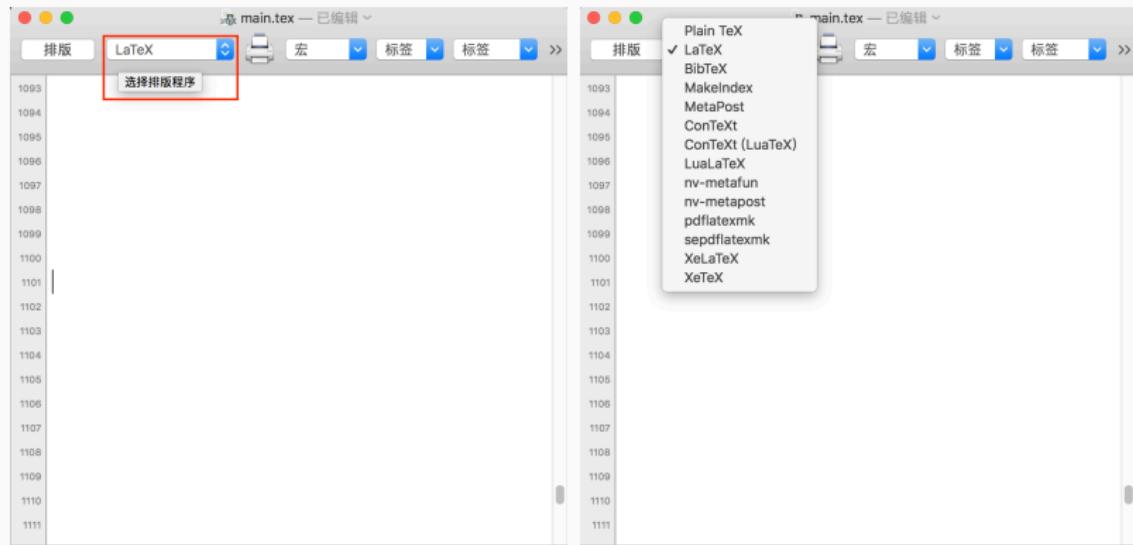


☛ Launch 图标

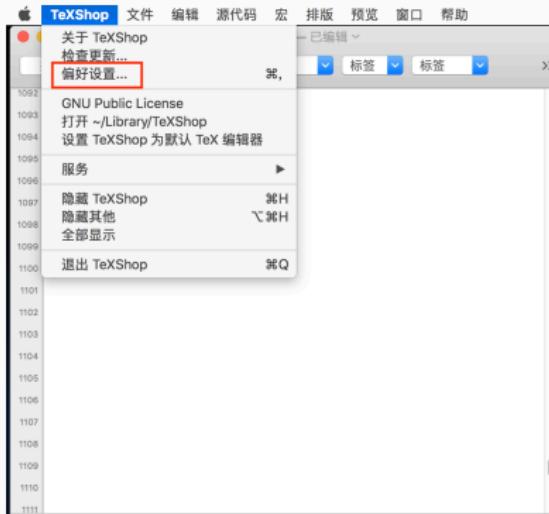


运行 TeXShop

选择排版程序



☛ 点击 TeXShop
☛ 点击偏好设置

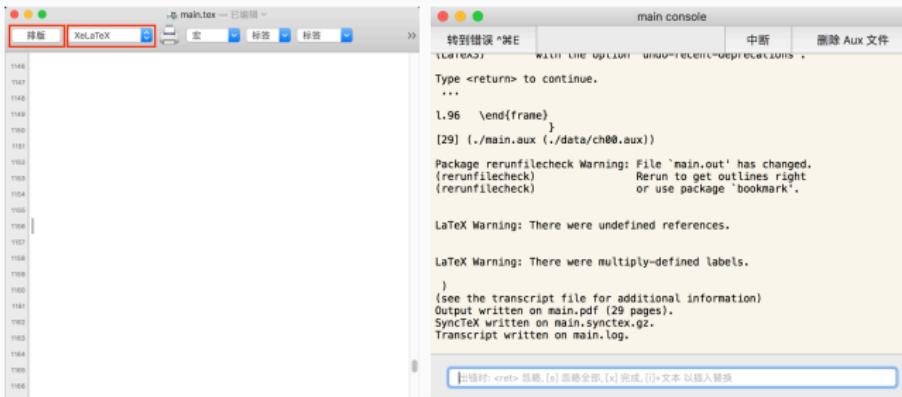


◆ 排版

☛ 选择 XeLatex，然后点击 排版

☛ 在运行平台 console 中编译 tex 文件

☛ 生成 pdf 文件



- [1] KNUTH D E.
The TeXbook: Computers & Typesetting, volume C [M]. 1984.
Boston: Addison-Wesley Publishing Company
- [2] 刘海洋.
LATEX 入门 [M]. 2013.
北京: 电子工业出版社
- [3] 高冈昌生.
翻译: 刘庆, 监修: 陈嵘.
西文排版: 排版的基础和规范 [M]. 2016.
北京: 中信出版集团
- [4] 小林章.
翻译: 刘庆, 监修: 陈嵘.
西文字体: 字体的背景知识和使用方法 [M]. 2014.
北京: 中信出版集团
- [5] OETIKER T, PARTL H, HYNA I and SCHLEGL E.
翻译: CTeX 开发小组.
一份(不太)简短的 LATEX 2_E 介绍: 或 106 分钟了解 LATEX 2_E [EB/OL]. 2018.
<https://ctan.org/pkg/lshort-zh-cn>
- [6] 汪彧之, 陈晟祺.
如何使用 LATEX 排版论文 [EB/OL]. 2018.
PDF: 
- [7] 刘海洋.
LATEX 入门 [EB/OL]. 2013.
PDF: 
- [8] 林莲枝.
漫谈 LATEX 排版常见概念误区: 别把 LATEX 当 Word 用! [EB/OL]. 2018.
PDF: 
- [9] Wikibooks.
LATEX—Wikibooks, The Free Textbook Project [EB/OL].
<https://en.wikibooks.org/wiki/LaTeX>
- [10] Overleaf.
Overleaf Documentation [EB/OL].
<https://www.overleaf.com/learn>
- [11] 刘庆.
孔雀计划: 中文字体排印的思路 [EB/OL].
<https://thetype.com/kongque>

*感谢现代 LATEX 入门讲座作者曾祥东的汇总整理, 本文中的 \link 等命令也来自该文档, 在此一并对作者致以衷心的感谢!

