

软件

SOFTWARE USAGE

CRYSTAL SUMMER CAMP 2018

CRYSTAL EDUCATION – TURX

Contents

Windows / Linux (Ubuntu)

IDE

Web

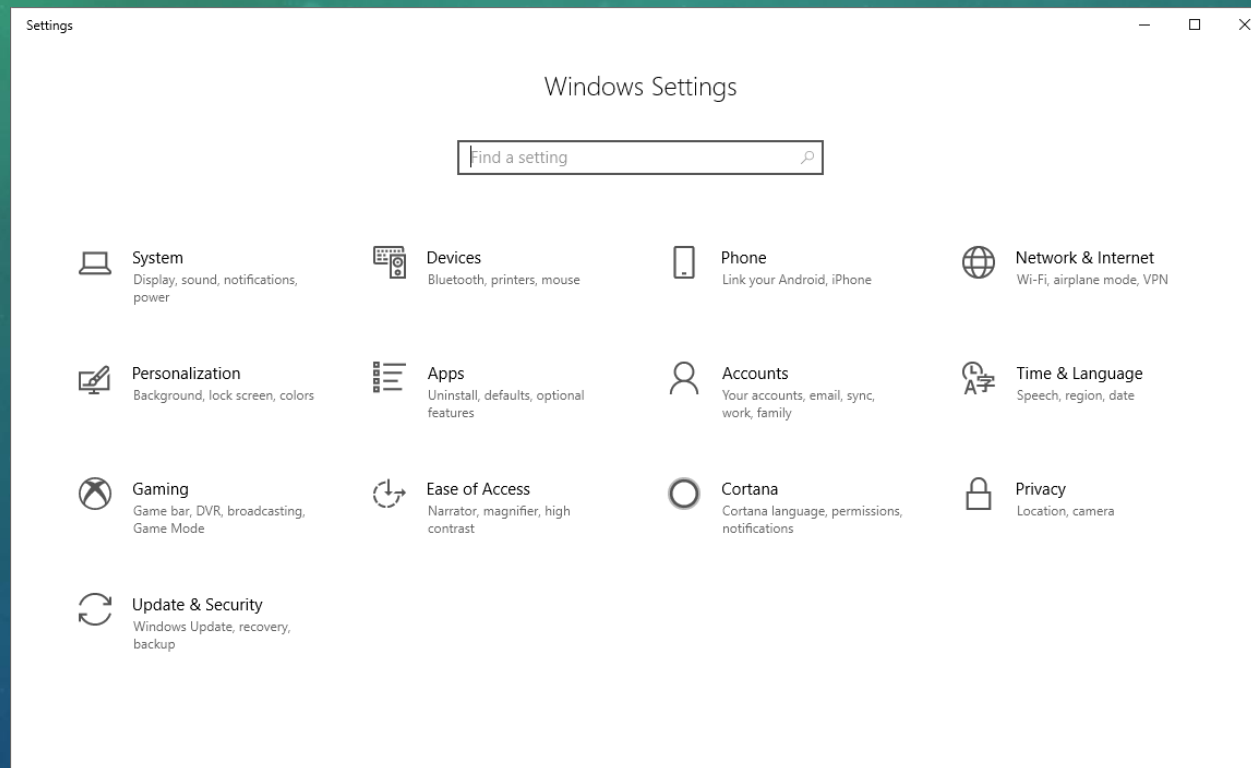
WINDOWS

OPERATING SYSTEM USAGE

WHAT IS WINDOWS

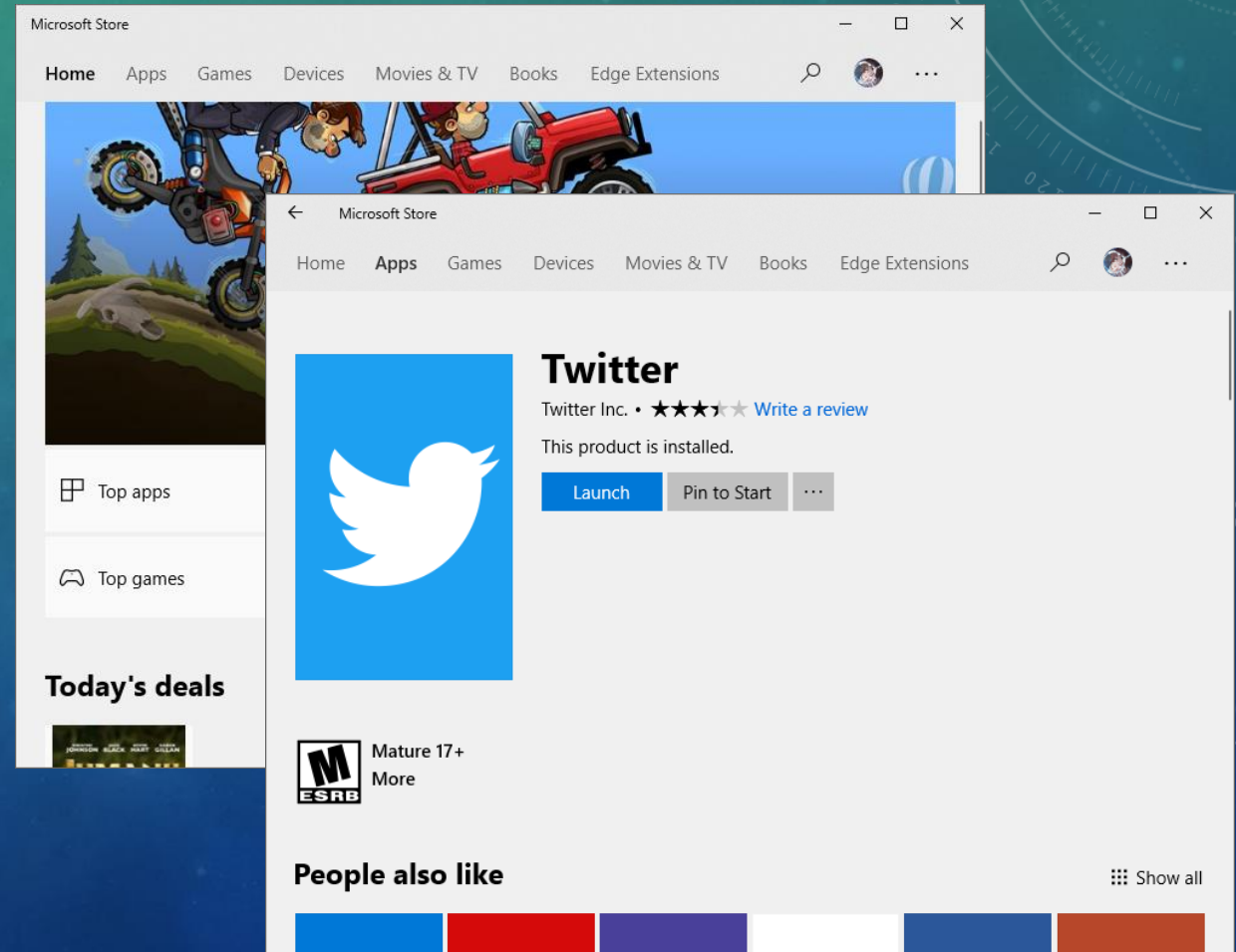
- Official site: <https://windows.com>
- A fully comprehensive operating system, you can use it for any industry

'SETTINGS' APP



'STORE' APP

- Quick Start tutorial:
<https://go.microsoft.com/fwlink/?linkid=825673>



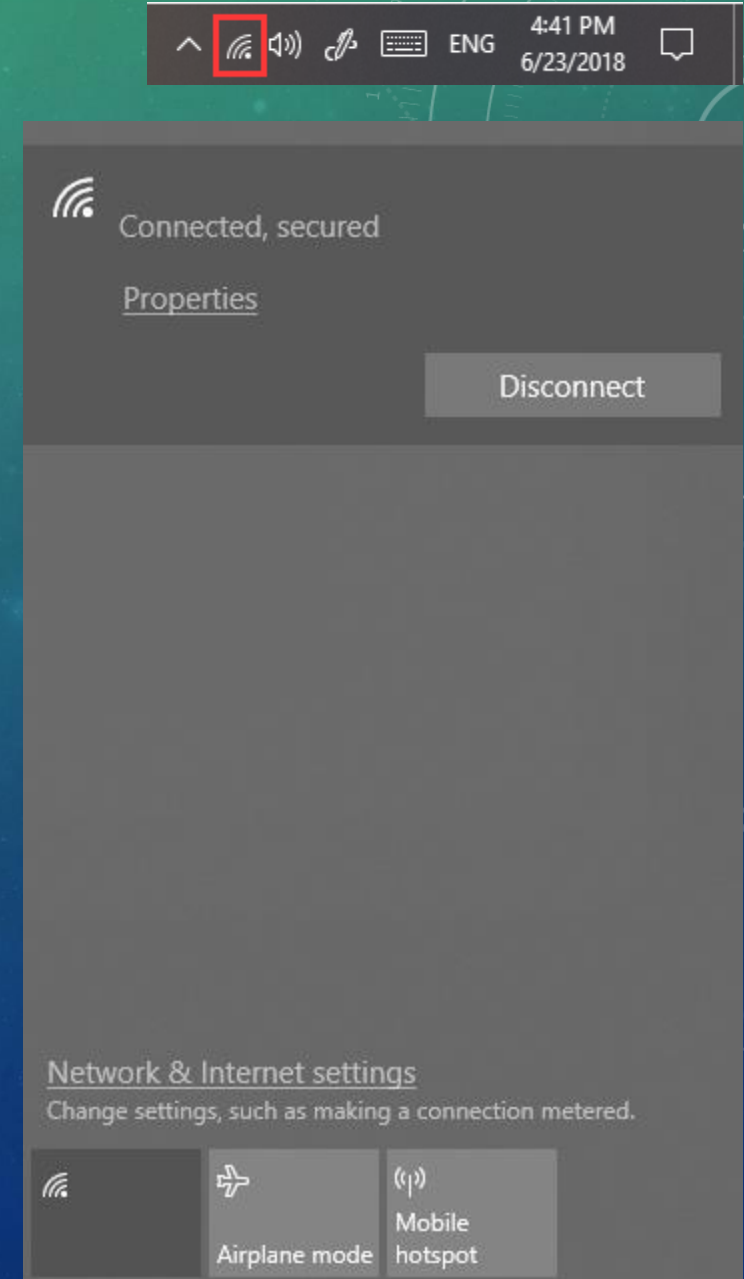
CONNECT TO INTERNET

1. Click the Internet icon
2. Select a connection
3. Connect it

<https://support.microsoft.com/en-us/help/17164/windows-10-get-online>

Have issues?

- <https://support.microsoft.com/en-us/help/4000432/windows-10-fix-wi-fi-problems>
- <https://support.microsoft.com/en-us/help/10741/windows-fix-network-connection-issues>



WINDOWS FILES

- *.exe: Common Executable File
- *.bat: Batch Executable File
- *.ps1: PowerShell Executable File
- *.msi: Windows Installer Package
- *.vhd / *.vhdx: Visual Hard Disk File
- *.dll: Dynamic Link Library File

OTHER ISSUES

- <https://support.microsoft.com/windows>

The background is a gradient from green at the top to blue at the bottom, filled with small white dots. On the right side, there are several faint, white technical graphics: a large circular gauge with a scale from 0 to 210, a smaller circular gauge with a scale from 0 to 100, and a dashed circular arrow. On the left side, there is a partial view of a circular arrow.

UBUNTU

OPERATING SYSTEM USAGE

WHAT IS UBUNTU

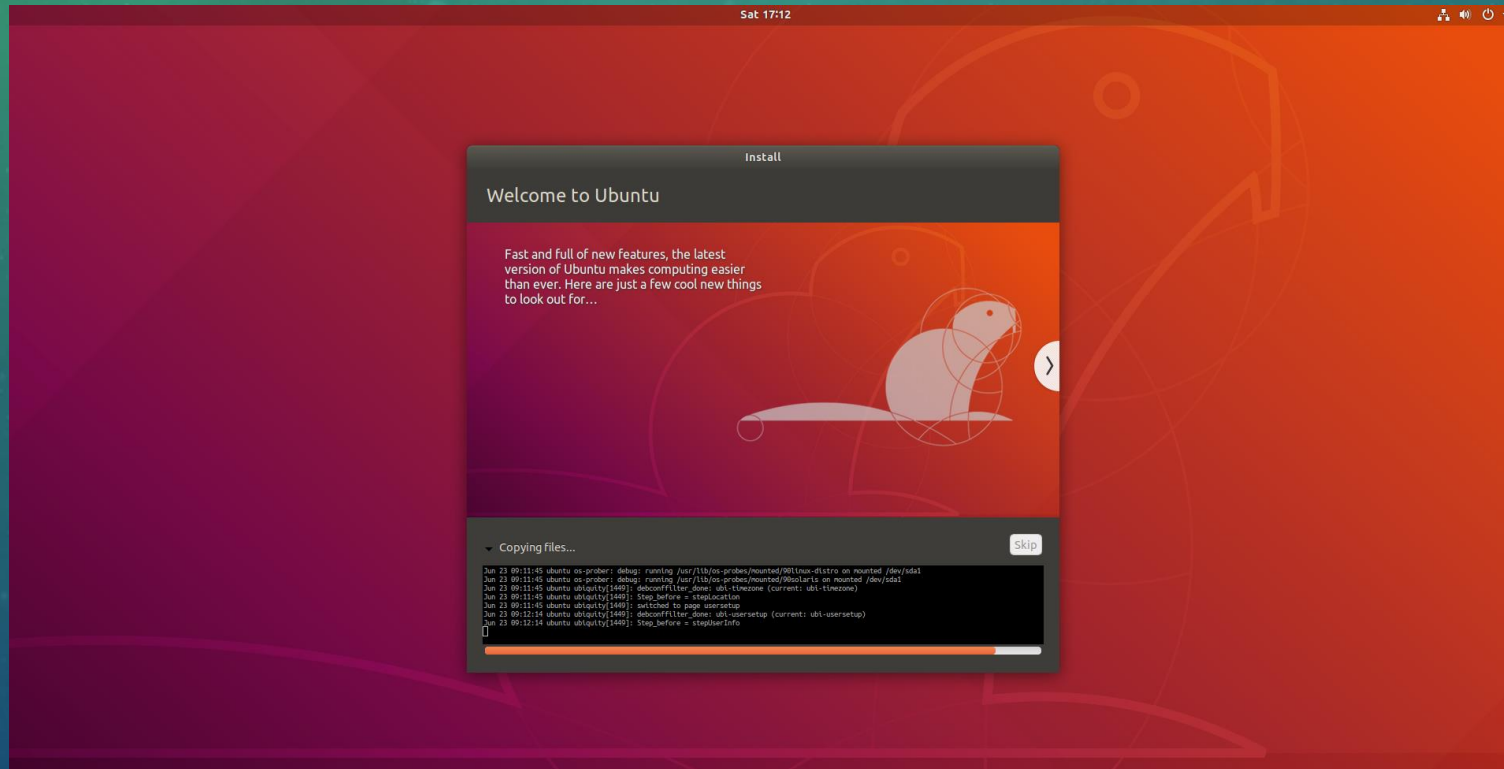
最广泛桌面
Linux

- The leading operating system for PCs, IoT devices, servers and the cloud | Ubuntu
- Ubuntu is an open source software operating system that runs from the desktop, to the cloud, to all your internet connected things.
- The world's most popular operating system across public clouds and OpenStack clouds
- The fastest way to go from development to production in IoT
- The number one platform for containers
- Fast, secure and simple, Ubuntu powers millions of PCs worldwide

UBUNTU DESKTOP

- Ubuntu for desktops
- The open source Ubuntu desktop operating system powers millions of PCs and laptops around the world.

INSTALLATION



FEATURES

- Complete
- Ubuntu comes with everything you need to run your organization, school, home or enterprise. All the essential applications, like an office suite, browsers, email and media apps come pre-installed and thousands more games and applications are available in the Ubuntu Software Centre.
- Open source
- Ubuntu has always been free to download, use and share. We believe in the power of open source software; Ubuntu could not exist without its worldwide community of voluntary developers.

FEATURES

- Secure
- With a built-in firewall and virus protection software, Ubuntu is one of the most secure operating systems around. And the long-term support releases give you five years of security patches and updates.
- Accessible
- Computing is for everyone regardless of nationality, gender or disability. Ubuntu is fully translated into over 50 languages and includes essential assistive technologies.

FEATURES

- Looks great on the latest devices
- Ubuntu is designed to work beautifully on the latest laptops, desktops and touch screen devices, it looks incredible on high resolution screens — and with touch screen enhancements and interface refinements including individual menu bars in each application window, it's now even easier to use.
- Available on a huge range of hardware
- Canonical works with the world's leading computer manufacturers to certify that Ubuntu works on a huge range of devices. It means that Ubuntu is now available at thousands of retailers across China, India, South East Asia and Latin America.
- And Ubuntu isn't just for the desktop, it is used in data centers around the world powering every kind of server imaginable and is by far, the most popular operating system in the cloud.

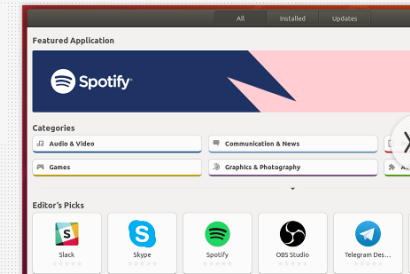
Welcome to Ubuntu

Fast and full of new features, the latest version of Ubuntu makes computing easier than ever. Here are just a few cool new things to look out for...



Find even more software

Say goodbye to searching the web for new software. With access to the Snap Store and the Ubuntu software archive, you can find and install new apps with ease. Just type in what you're looking for, or explore categories such as Graphics & Photography, Games and Productivity, alongside helpful reviews from other users.

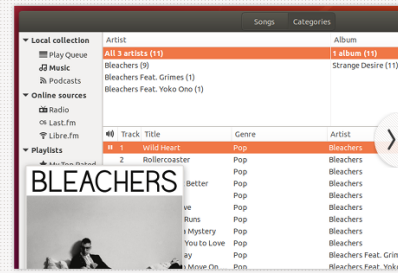


Take your music with you

Ubuntu comes with the amazing Rhythmbox music player. With advanced playback options, it's simple to queue up the perfect songs. And it works great with CDs and portable music players, so you can enjoy all your music wherever you go.

Included software

- Rhythmbox Music Player



Have fun with your photos

Shotwell is a handy photo manager that is ready for your gadgets. Connect a camera or a phone to transfer your photos, then it's easy to share them and keep them safe. If you're feeling creative, you can try lots of photo apps from the Ubuntu Software Center.

Included software

- Shotwell Photo Manager

Supported software

- GIMP Image Editor
- Pitivi Video Editor



Make the most of the web

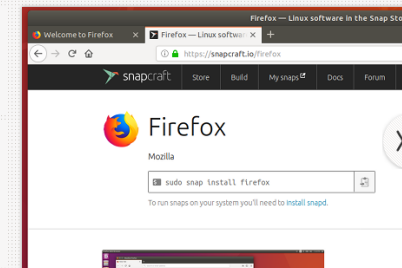
Ubuntu includes Firefox, the web browser used by millions of people around the world. And web applications you use frequently (like Facebook or Gmail, for example) can be pinned to your desktop for faster access, just like apps on your computer.

Included software

- Firefox web browser

Supported software

- Flash
- Chromium

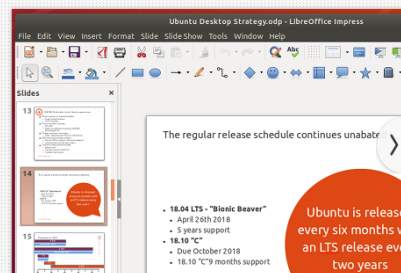


Everything you need for the office

LibreOffice is a free office suite packed with everything you need to create documents, spreadsheets and presentations. Compatible with Microsoft Office File formats, it gives you all the features you need, without the price tag.

Included software

- LibreOffice Writer
- LibreOffice Calc
- LibreOffice Impress

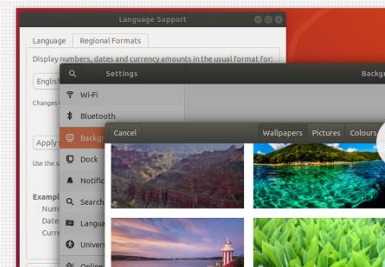


Access for everyone

At the heart of the Ubuntu philosophy is the belief that computing is for everyone. With advanced accessibility tools and options to change language, colour scheme and text size, Ubuntu makes computing easy – whoever and wherever you are.

Customization options

- Appearance
- Assistive technologies
- Language support



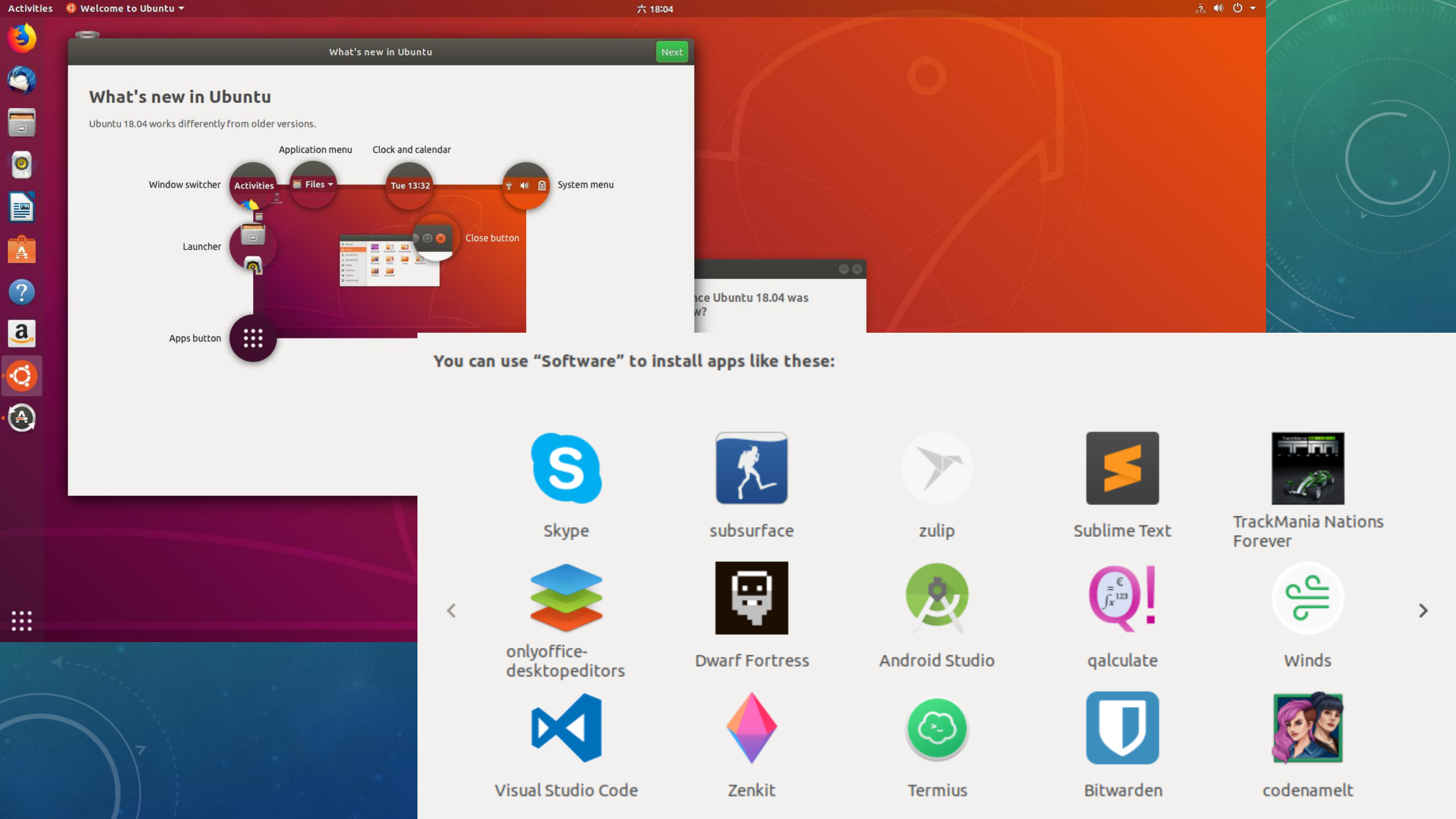
Help and support

The Official documentation covers many of the most common areas about Ubuntu. It's available both [online](#) and via the Help icon in the Dock.

At [Ask Ubuntu](#) you can ask questions and search an impressive collection of already answered questions. Support in your own language may be provided by your [Local Community Team](#).

For pointers to other useful resources, please visit [Community support](#) or [Commercial support](#).





What's new in Ubuntu

Next

What's new in Ubuntu

Ubuntu 18.04 works differently from older versions.



You can use "Software" to install apps like these:



Skype



subsurface



zulip



Sublime Text



TrackMania Nations
Forever



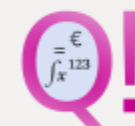
onlyoffice-
desktopeditors



Dwarf Fortress



Android Studio



qalculate



Winds



Visual Studio Code



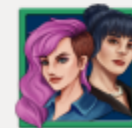
Zenkit



Termius



Bitwarden



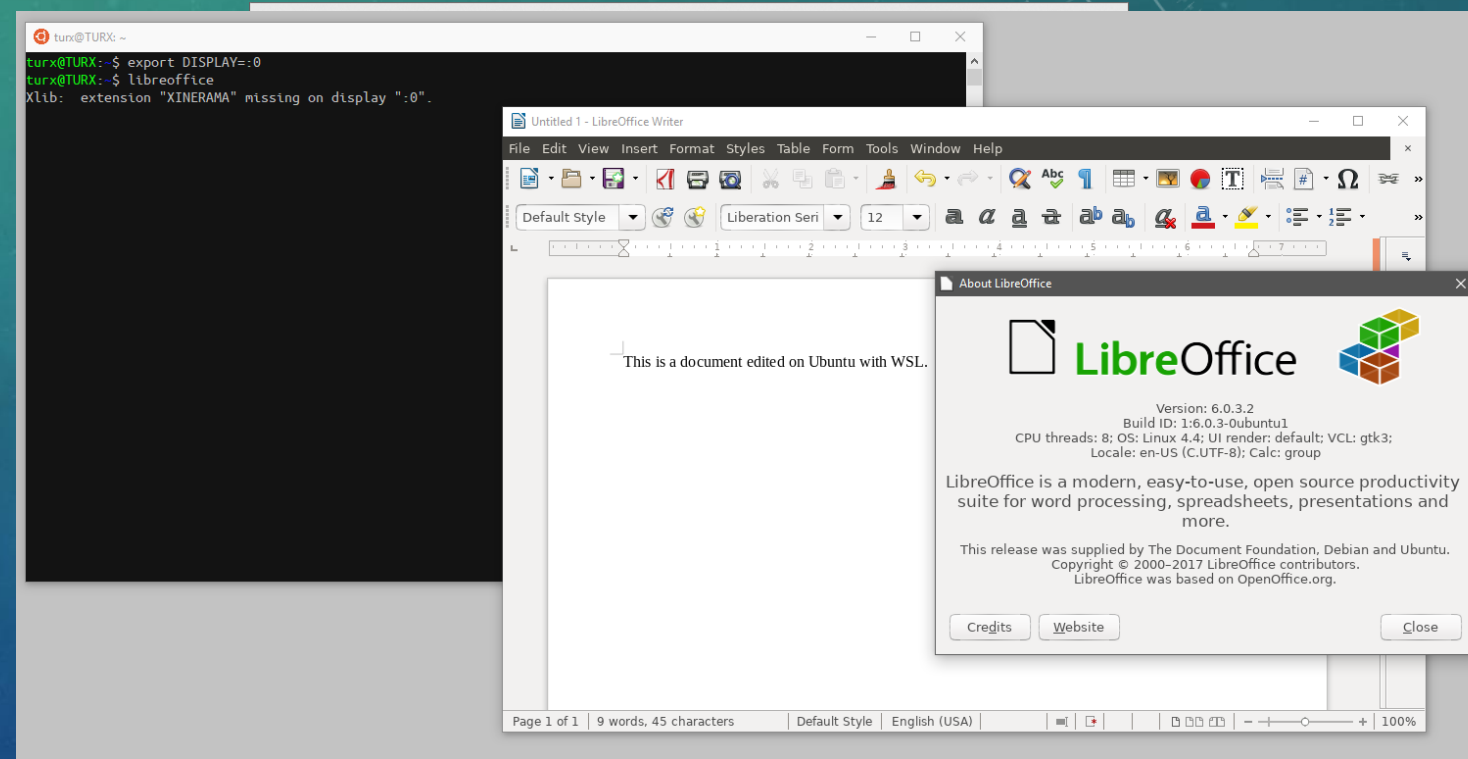
codenamelt

VM TRY

- Common Usage
- Install & Remove Software
- /etc Configuration
- gedit
- gvim

WINDOWS SUBSYSTEMS FOR LINUX (WSL)

- Use Linux amd64 applications. (even include GUI with a X Server!)



INSTALL DESKTOP APPLICATIONS

- First, you should update your software repository.
 1. `sudo apt update`
 2. `sudo apt install ubuntu-desktop`
- Third, use these command.
 1. `export DISPLAY=:num`
 2. `appname`
- Second, install some useful applications.
 - anjuta
 - geany
 - chromium
 - Many others...

SYSTEM

- arch // CPU Architecture
- uname -a // System Details
- dmidecode -q // Components
- cat /proc/cpuinfo
- cat /proc/interrupts
- cat /proc/meminfo
- cat /proc/swaps
- cat /proc/version
- cat /proc/net/dev
- cat /proc/mounts

- lsusb -tv // List USB Devices
- date
- cal // Calendar
- date // Time
- shutdown (-h / -r) now // Shutdown
- init 0 // Hard Shutdown
- halt (--poweroff / --reboot) // Halt
- reboot
- logout

系统内部 分区文14
C:\swapfile.sys
Windows Thin PC

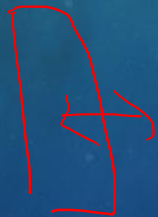
HLT

FILESYSTEM

- `cd (* / . / .. / / / ~ / dirname)`
- `pwd` // *This directory*
- `ls (-l / -a) (dirname)`
- `(external) tree (dirname)`
- `mkdir dirname`
- `touch filename`
- `rm (-r / -f) filename / dirname`
- `cp filename1 filename2`
- `ln filename1 filename2`

DIR → directory 目录
FILE → 文件

F: \A \B a.txt B a.txt



- `find dirname -name filename`
- `mount /dev/devicename dirname`
- `unmount /dev/devicename`
- `mount -t smbfs -o username=userstr, password=passstr //sharename dirname`
// *Windows SAMBA Share*
- `df -h` // *List mounted filesystems*
- `du -sh dirname` // *Estimate occupied space*

USER & PERMISSION

- groupadd / groupdel groupname
- useradd / userdel username
- passwd (username)
- ls -lh // Show permissions
- chmod permission dirname
- chgrp groupname dirname
- chown username dirname
- sudo command (-u username)

root
Super User

sudo curl baidu.com -u www

ARCHIVE

- `tar -cvf filename files` // *Create TAR*
- `tar -xvf filename` // *Extract TAR*
- `zip -r filename files` // *Create ZIP*
- `unzip filename` // *Extract ZIP*

PACKAGE

DM
Desktop Manager

- `dpkg -i filename` // *Install DEB*
- `dpkg -r appname` // *Uninstall app*
- `dpkg -l` // *List apps*
- `dpkg-reconfigure appname` // *Configure app*

A package
B C

remove
purge

A → B C
A → ~~B C~~

- `apt install appname`
- `apt update`
- `apt full-upgrade`
- `apt remove appname`
- `apt purge appname`
- `apt clean`

移除

TEXT

- cat filename
- more filename
- touch filename
- echo string > filename
- echo string >> filename
- command | grep string

SWAP

- `mkswap /dev/devicename`
- `swapon /dev/devicename`

SSH

compress FI



- ssh (-X / -C / -l username) hostname
- ssh-keygen -t rsa -b 4096 -C string
- ssh-add filename *// Add key to ssh-agent*

TRY

- Guess the output
- Answer:

test

>> 向下路加一行
7 从这开始写

```
turx@TURX:~$ echo test >> a.txt
```

```
turx@TURX:~$ echo test > a.txt
```

```
turx@TURX:~$ cat a.txt
```

会得到什么
结果

TRY

- How to do it?
- Answer:

```
turx@TURX:~$ chmod 666 a.txt
```

```
turx@TURX:~$ chmod ??? a.txt
turx@TURX:~$ ls -lh ~
total 4.0K
drwxr-xr-x 1 turx turx 4.0K Jun  9 23:56 Desktop
drwxr-xr-x 1 turx turx 4.0K Jun  9 23:56 Documents
drwxr-xr-x 1 turx turx 4.0K Jun  9 23:56 Downloads
drwxr-xr-x 1 turx turx 4.0K Jun  9 23:56 Music
drwxr-xr-x 1 turx turx 4.0K Jun  9 23:56 Pictures
drwxr-xr-x 1 turx turx 4.0K Jun  9 23:56 Public
-rw-rw-rw- 1 turx turx 3.1K Mar 29  2017 Release.key
drwxr-xr-x 1 turx turx 4.0K Jun  9 23:56 Templates
drwxr-xr-x 1 turx turx 4.0K Jun  9 23:56 Videos
-rw-rw-rw- 1 turx turx 10 Jun 25 09:03 a.txt
```

d=directory
r=read
w=write
x=execute

TRY

- Guess the output
- Answer:

```
turx@TURX:~$ tree /home/ | grep 'Do*'
├── Desktop
├── Documents
├── Downloads
```

```
turx@TURX:~$ tree /home/

/home/
├── turx
│   ├── Desktop
│   ├── Documents
│   ├── Downloads
│   ├── Music
│   ├── Pictures
│   ├── Public
│   ├── Release.key
│   ├── Templates
│   ├── Videos
│   └── a.txt
9 directories, 2 files

turx@TURX:~$ tree /home/ | grep 'Do*'
├── Desktop
├── Documents
├── Downloads
```

Linux 的
这个命令
会输出这个

TRY

- Guess the output
- Answer:

equal.

Is \$(pwd)/a.txt equals to ~/a.txt ?

```
turx@TURX:~$ cat a.txt
```

```
test
```

```
test
```

```
turx@TURX:~$ if [ "$(cat $(pwd)/a.txt)" == "$(cat  
~/a.txt)" ];
```

```
> then echo "equal.";
```

```
> fi
```

```
if(fileContent("${pwd}/a.txt") == fileContent("~/a.txt")) system("echo equal.");
```

集成开发环境

IDE

COMMON SOFTWARE USAGE

IDE LIST (CCS 2018)

我推荐圈出来的这些

- Atom Editor
- Anjuta
- Dev-C++
- Geany
- GitLab Web IDE
- GUIDE (NOI)
- JetBrains IntelliJ IDEA

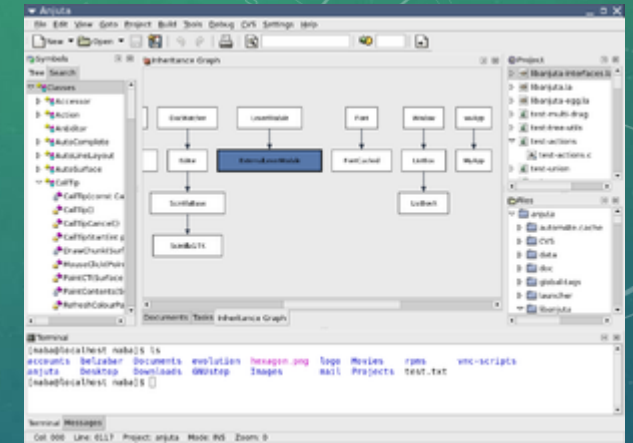
支持 Windows, Linux, 521 强
支持 Java

- JetBrains PhpStorm
- JetBrains PyCharm Edu
- MonoDevelop
- NetBeans
- Unity Editor
- Visual Studio
- Visual Studio Code

强大 IDE
强烈推荐

INTRODUCTION (FROM WIKIPEDIA)

维基百科



Anjuta, a C and C++ IDE for the GNOME environment

- An integrated development environment (IDE) is a software application that provides comprehensive facilities to computer programmers for software development. An IDE normally consists of a source code editor, build automation tools, and a debugger. Most modern IDEs have intelligent code completion. Some IDEs, such as NetBeans and Eclipse, contain a compiler, interpreter, or both; others, such as SharpDevelop and Lazarus, do not. The boundary between an integrated development environment and other parts of the broader software development environment is not well-defined. Sometimes a version control system, or various tools to simplify the construction of a graphical user interface (GUI), are integrated. Many modern IDEs also have a class browser, an object browser, and a class hierarchy diagram, for use in object-oriented software development.

Java
Python

TOPICS (FROM WIKIPEDIA)

GNU Toolchain

C++ GCC GDB
编译工具链

Visual programming

- Visual programming is a usage scenario in which an IDE is generally required. Visual Basic allows users to create new applications by moving programming, building blocks, or code nodes to create flowcharts or structure diagrams that are then compiled or interpreted. These flowcharts often are based on the Unified Modeling Language.
- This interface has been popularized with the Lego Mindstorms system, and is being actively pursued by a number of companies wishing to capitalize on the power of custom browsers like those found at Mozilla. KTechlab supports flowcode and is a popular opensource IDE and Simulator for developing software for microcontrollers. Visual programming is also responsible for the power of distributed programming (cf. LabVIEW and EICASLAB software). An early visual programming system, Max, was modeled after analog synthesizer design and has been used to develop real-time music performance software since the 1980s. Another early example was Prograph, a dataflow-based system originally developed for the Macintosh. The graphical programming environment "Grape" is used to program qfix robot kits.
- This approach is also used in specialist software such as Openlab, where the end users want the flexibility of a full programming language, without the traditional learning curve associated with one.

Language support

- Some IDEs support multiple languages, such as GNU Emacs based on C and Emacs Lisp, and IntelliJ IDEA, Eclipse, MyEclipse or NetBeans, all based on Java, or MonoDevelop, based on C#, or PlayCode.
- Support for alternative languages is often provided by plugins, allowing them to be installed on the same IDE at the same time. For example, Flycheck is a modern on-the-fly syntax checking extension for GNU Emacs 24 with support for 39 languages.[3] Eclipse, and Netbeans have plugins for C/C++, Ada, GNAT (for example AdaGIDE), Perl, Python, Ruby, and PHP, which are selected between automatically based on file extension, environment or project settings.

Attitudes across different computing platforms

Unix programmers can combine command-line POSIX tools into a complete development environment, capable of developing large programs such as the Linux kernel and its environment.[4] In this sense, the entire Unix system functions as an IDE.[5] The free software GNU tools (GNU Compiler Collection (GCC), GNU Debugger (gdb), and GNU make) are available on many platforms, including Windows.[6] The pervasive Unix philosophy of "everything is a text stream" enables developers who favor command-line oriented tools to use editors with support for many of the standard Unix and GNU build tools, building an IDE with programs like Emacs[7][8][9] or Vim. Data Display Debugger is intended to be an advanced graphical front-end for many text-based debugger standard tools. Some programmers prefer managing makefiles and their derivatives to the similar code building tools included in a full IDE. For example, most contributors to the PostgreSQL database use make and gdb directly to develop new features.[10] Even when building PostgreSQL for Microsoft Windows using Visual C++, Perl scripts are used as a replacement for make rather than relying on any IDE features.[11] Some Linux IDEs such as Geany attempt to provide a graphical front end to traditional build operations.

- On the various Microsoft Windows platforms, command-line tools for development are seldom used. Accordingly, there are many commercial and non-commercial products. However, each has a different design commonly creating incompatibilities. Most major compiler vendors for Windows still provide free copies of their command-line tools, including Microsoft (Visual C++, Platform SDK, .NET Framework SDK, nmake utility).

- IDEs have always been popular on the Apple Macintosh's classic Mac OS and macOS, dating back to Macintosh Programmer's Workshop, Turbo Pascal, THINK Pascal and THINK C environments of the mid-1980s. Currently macOS programmers can choose between native IDEs like Xcode and open-source tools such as Eclipse and Netbeans. Activestate Komodo is a proprietary multilanguage IDE supported on macOS.

- With the advent of cloud computing, some IDEs are available online and run within web browsers.

编译工具链：所有开发工具
的集合

Integrated development environments (from Wikipedia)

C and C++

Open
source

- [Android Studio](#)
- [Anjuta](#)
- [Code::Blocks](#)
- [CodeLite](#)
- [Dev-C++](#)
- [Eclipse](#)
- [Geany](#)
- [GNAT Programming Studio](#)
- [GNOME Builder](#)
- [KDevelop](#)
- [MonoDevelop](#)
- [NetBeans](#)
- [QDevelop](#)
- [Qt Creator](#)
- [SharpDevelop](#)
- [Ultimate++](#)
- [OpenWatcom](#)

IDE 表

Freeware

- [Oracle Developer Studio](#)
- [Visual Studio Community](#)
- [Xcode](#)

Retail

- [C++Builder](#)
- [Eclipse](#)-based
 - [CodeWarrior](#)
 - [MyEclipse](#)
- [Visual Studio](#)
- By [JetBrains](#)
 - [IntelliJ IDEA](#)
 - [AppCode](#)
 - [CLion](#)
- [LabWindows/CVI](#)
- [LccWin32](#)
- [IBM Rational Software Architect](#)
- [Understand](#)

Discontinued

- [IBM VisualAge](#)

<u>Java</u>	
<u>Open source</u>	<ul style="list-style-type: none">• BlueJ• DrJava• Eclipse• Geany• Greenfoot• IntelliJ IDEA Community Edition• Android Studio• NetBeans• Servoy Community Edition
<u>Freeware</u>	<ul style="list-style-type: none">• jGRASP• JDeveloper• Xcode
<u>Retail</u>	<ul style="list-style-type: none">• Builder• Creator• MyEclipse• IBM<ul style="list-style-type: none">• Rational Application Developer• WebSphere Integration Developer• JetBrains IntelliJ IDEA• Servoy Business Application Platform Edition• Understand
<u>Discontinued</u>	<ul style="list-style-type: none">• Metrowerks CodeWarrior Pro for Java• Sun Java Studio Creator (superseded by NetBeans)• Visual Age (superseded by Eclipse)• Visual Café (aka Espresso, superseded by JBuilder)• Visual J++• Xelfi (became NetBeans)
<u>CLI</u>	<ul style="list-style-type: none">• MonoDevelop• SharpDevelop• Visual Studio• Visual Studio Code• PascalABC.NET• Rider
<u>Flash</u>	<ul style="list-style-type: none">• Adobe Flash Builder• FlashDevelop• Powerflasher FDT

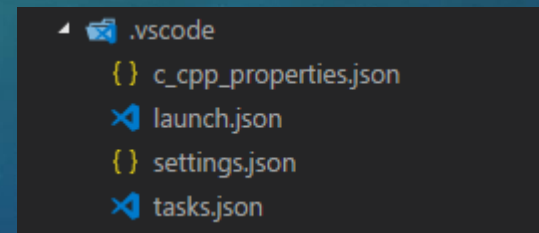
JetBrains

<u>PHP</u>	<ul style="list-style-type: none">•Aptana•NetBeans•PhpStorm•KDevelop
<u>Python</u>	<ul style="list-style-type: none">•Eric•IntelliJ IDEA•Light Table•Ninja-IDE•PyCharm•PyDev•Spyder•Wing IDE•KDevelop
<u>Pascal</u>	<ul style="list-style-type: none">•Delphi•Lazarus
<u>R</u>	<ul style="list-style-type: none">•RStudio

VISUAL STUDIO CODE USAGE FOR C++

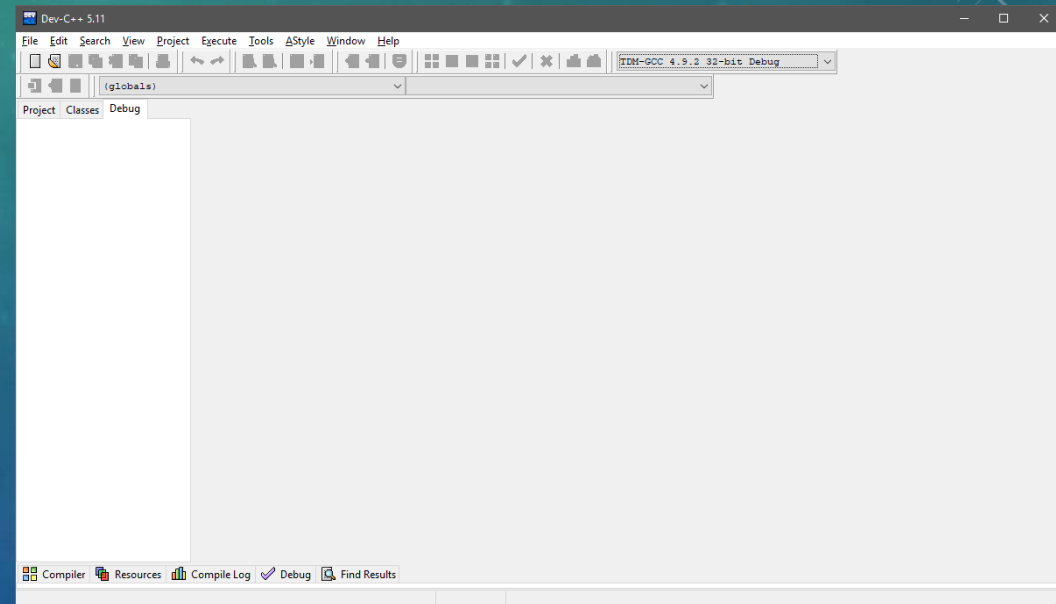
如何调用VS Code 对 C++

- Install MinGW
- Get these files (1/VSCODE) and put them into your project
- Enjoy coding
- Breakpoint & Watch



DEV-C++

- Breakpoint
- Watch
- Build
- Run



Web

WEB

COMMON SOFTWARE USAGE

Google Chrome

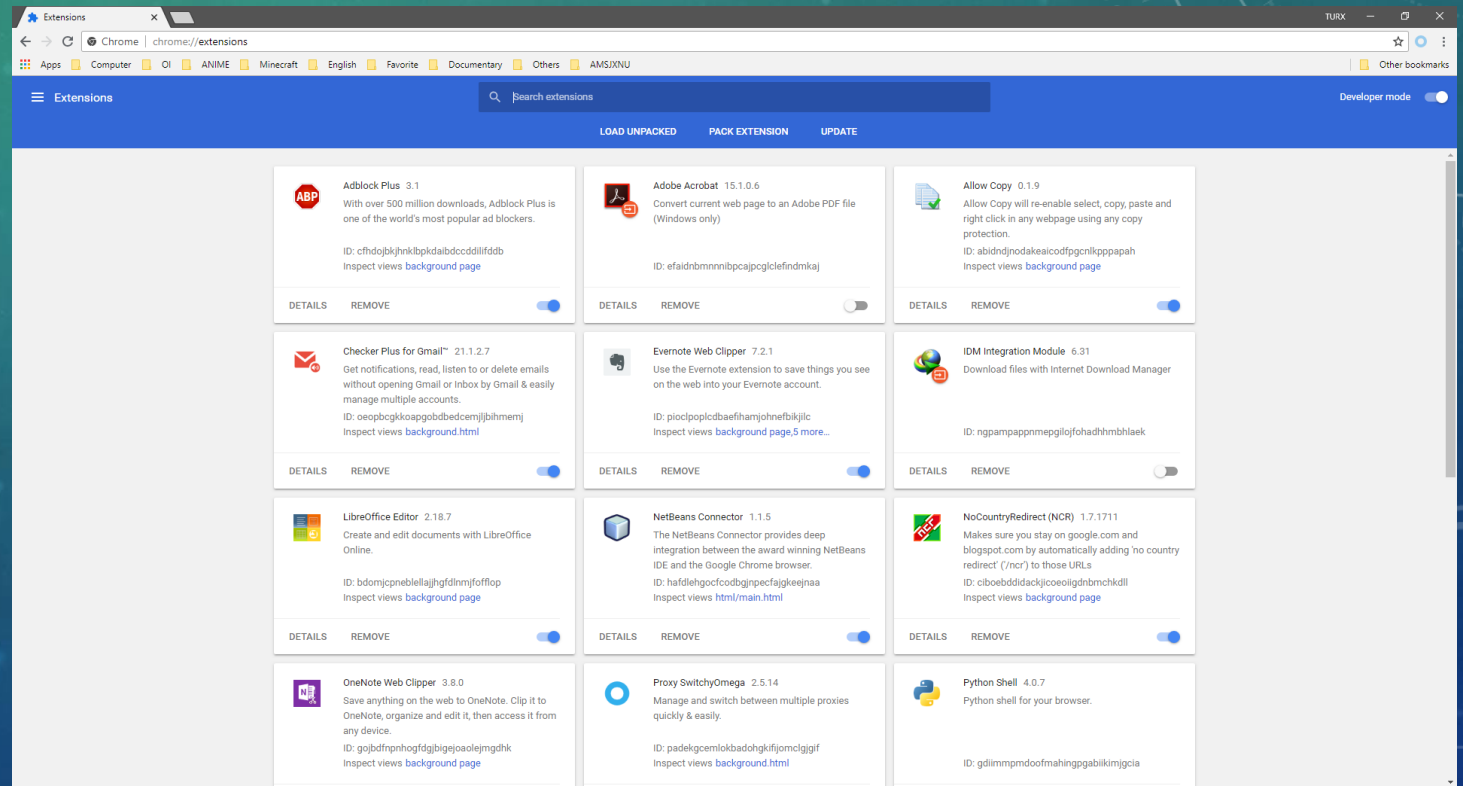
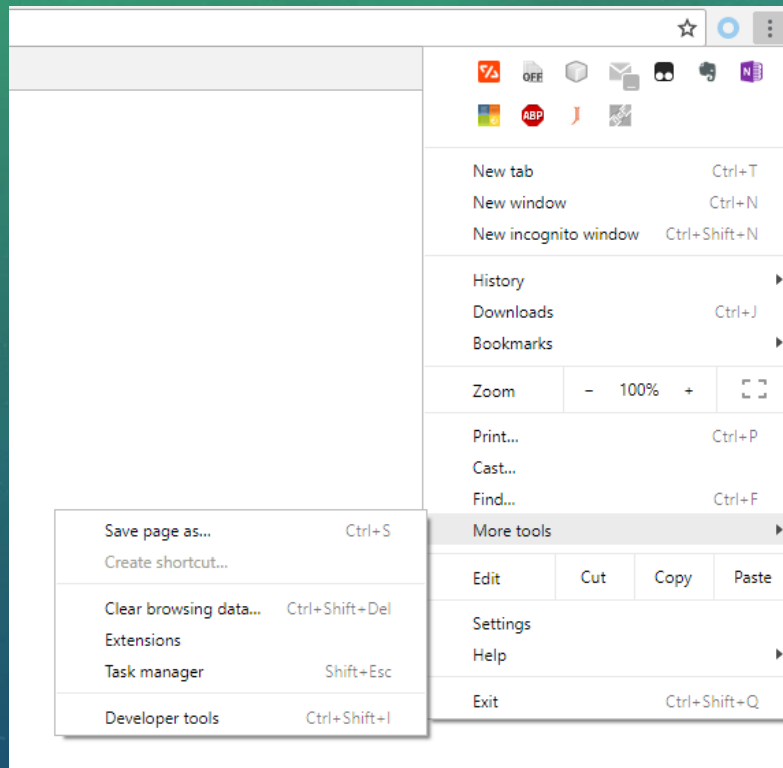
CHROMIUM (FROM WIKIPEDIA)

解码器
MP4

UI、体验

- Chromium is an open-source Web browser project started by Google, to provide the source code for the proprietary Google Chrome browser.[5] The two browsers share the majority of code and features, though there are some minor differences in features and logos, and they have different licensing.
- The Chromium Project takes its name from the element chromium, the metal from which chrome plating is made.[6] Google's intention, as expressed in the developer documentation, was that Chromium would be the name of the open-source development project and that the final product's name would be Chrome;[7] however, other developers have taken the Chromium code and released versions under the Chromium name.
- One of the major aims of the project is for Chromium to be a tabbed window manager, or shell for the Web, as opposed to it being a traditional browser application. The application is designed to have a minimalist user interface. The developers state that it "should feel lightweight (cognitively and physically) and fast".[8]

EXTENSIONS



INSTALL EXTENSIONS FROM STORE

The image is a collage of three screenshots illustrating the process of installing extensions from the Chrome Web Store.

Top Left Screenshot: Shows the Chrome Web Store interface. The left sidebar has a search bar with "vnc" entered. The main area displays "Featured" extensions, including "Diigo Web Collector - Capture and Annotate". Below this, the "Recently Updated" section shows extensions like "Grammarly for Chrome", "Honey", "LastPass", and "Click&Clean".

Top Right Screenshot: A modal window for the "Word Online" extension. It features the Microsoft Word logo, a 4.5-star rating (4226 reviews), and the description: "Create, edit and share Word documents. Work with others on shared projects, in real-time." A prominent blue button labeled "Click to install" is at the bottom.

Bottom Screenshot: A modal window for the "VNC Viewer for Google Chrome" extension. It includes the VNC logo, a 4.5-star rating (1794 reviews), and a "Click to Launch" button. Below the button, there is a "Help" link and a "Connect" button. The "Connect" section contains an "Address" field with the value "192.168.2.1:80" and a "Picture Quality" dropdown menu set to "Automatic".

域名

X.99.com

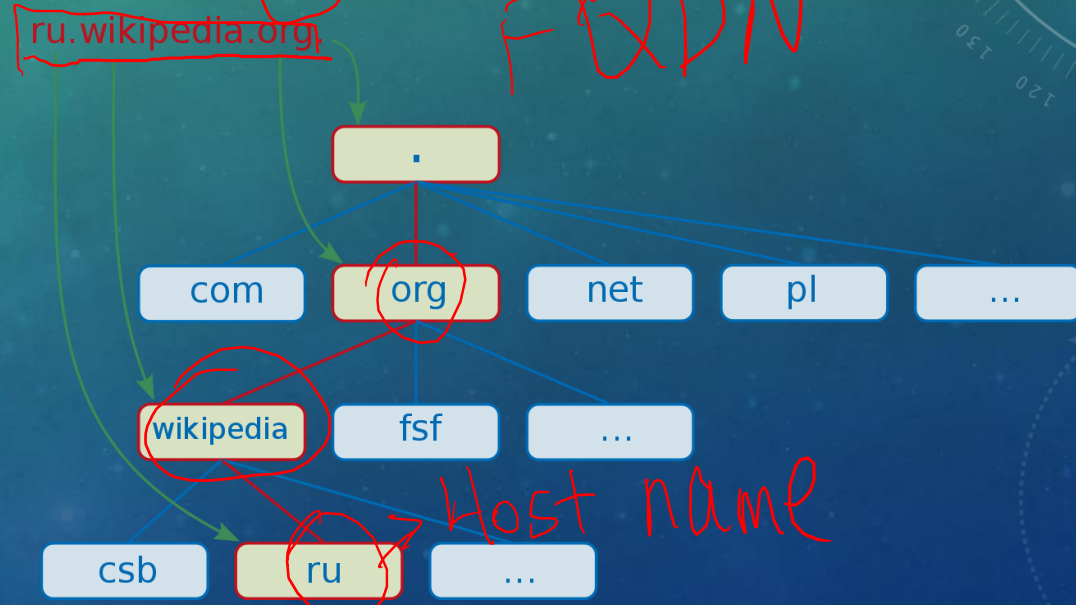
DOMAIN NAME (FROM WIKIPEDIA)

X.Y.Z

X.g.992.com

FQDN

- A domain name is an identification string that defines a realm of administrative autonomy, authority or control within the Internet. Domain names are formed by the rules and procedures of the Domain Name System (DNS). Any name registered in the DNS is a domain name. Domain names are used in various networking contexts and for application-specific naming and addressing purposes. In general, a domain name represents an Internet Protocol (IP) resource, such as a personal computer used to access the Internet, a server computer hosting a web site, or the web site itself or any other service communicated via the Internet. In 2017, 330.6 million domain names had been registered.^[1]
- Domain names are organized in subordinate levels (subdomains) of the DNS root domain, which is nameless. The first-level set of domain names are the top-level domains (TLDs), including the generic top-level domains (gTLDs), such as the prominent domains com, info, net, edu, and org, and the country code top-level domains (ccTLDs). Below these top-level domains in the DNS hierarchy are the second-level and third-level domain names that are typically open for reservation by end-users who wish to connect local area networks to the Internet, create other publicly accessible Internet resources or run web sites.
- The registration of these domain names is usually administered by domain name registrars who sell their services to the public.
- A fully qualified domain name (FQDN) is a domain name that is completely specified with all labels in the hierarchy of the DNS, having no parts omitted. Labels in the Domain Name System are case-insensitive, and may therefore be written in any desired capitalization method, but most commonly domain names are written in lowercase in technical contexts.^[2]



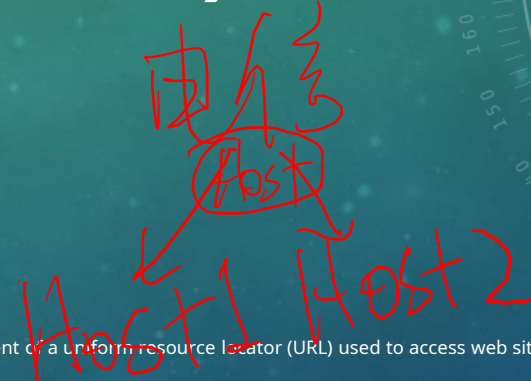
Host name

The hierarchy of labels in a fully qualified domain name.

DOMAIN NAME (FROM WIKIPEDIA)

- Purpose
- Domain names serve to identify Internet resources, such as computers, networks, and services, with a text-based label that is easier to memorize than the numerical addresses used in the Internet protocols. A domain name may represent entire collections of such resources or individual instances. Individual Internet host computers use domain names as host identifiers, also called host names. The term host name is also used for the leaf labels in the domain name system, usually without further subordinate domain name space. Host names appear as a component in Uniform Resource Locators (URLs) for Internet resources such as web sites (e.g., en.wikipedia.org).
- Domain names are also used as simple identification labels to indicate ownership or control of a resource. Such examples are the realm identifiers used in the Session Initiation Protocol (SIP), the Domain Keys used to verify DNS domains in e-mail systems, and in many other Uniform Resource Identifiers (URIs).
- An important function of domain names is to provide easily recognizable and memorable names to numerically addressed Internet resources. This abstraction allows any resource to be moved to a different physical location in the address topology of the network, globally or locally in an intranet. Such a move usually requires changing the IP address of a resource and the corresponding translation of this IP address to and from its domain name.
- Domain names are used to establish a unique identity. Organizations can choose a domain name that corresponds to their name, helping Internet users to reach them easily.
- A generic domain is a name that defines a general category, rather than a specific or personal instance, for example, the name of an industry, rather than a company name. Some examples of generic names are books.com, music.com, and travel.info. Companies have created brands based on generic names, and such generic domain names may be valuable.[citation needed]
- Domain names are often simply referred to as domains and domain name registrants are frequently referred to as domain owners, although domain name registration with a registrar does not confer any legal ownership of the domain name, only an exclusive right of use for a particular duration of time. The use of domain names in commerce may subject them to trademark law.

- Use in web site hosting
- The domain name is a component of a Uniform Resource Locator (URL) used to access web sites, for example:
 - URL: `http://www.example.net/index.html`
 - Top-level domain: net
 - Second-level domain: example
 - Host name: www
- A domain name may point to multiple IP addresses to provide server redundancy for the services offered, a feature that is used to manage the traffic of large, popular web sites.
- Web hosting services, on the other hand, run servers that are typically assigned only one or a few addresses while serving websites for many domains, a technique referred to as virtual web hosting. Such IP address overloading requires that each request identifies the domain name being referenced, for instance by using the HTTP request header field Host:, or Server Name Indication.



域名

域名 → IP1
域名 → IP2

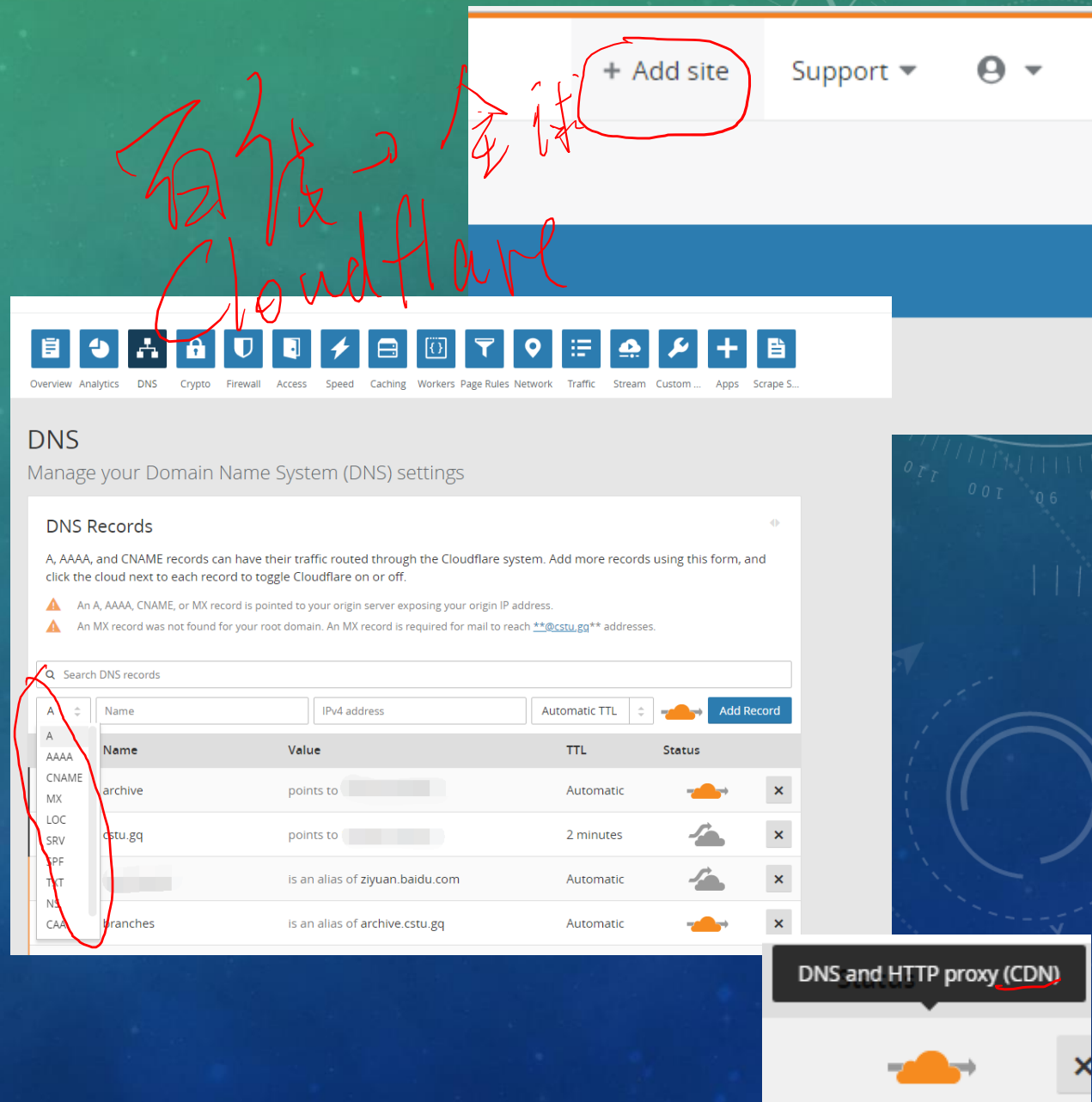
DNS RECORD (FROM WIKIPEDIA)

Type	ID (DEC)	Defining RFC	Description	Function
A	1	RFC 1035^[1]	Address record	Returns a 32-bit IPv4 address , most commonly used to map hostnames to an IP address of the host, but it is also used for DNSBLs , storing subnet masks in RFC 1101 , etc.
AAAA	28	RFC 3596^[2]	IPv6 address record	Returns a 128-bit IPv6 address , most commonly used to map hostnames to an IP address of the host.
CAA	257	RFC 6844	Certification Authority Authorization	DNS Certification Authority Authorization , constraining acceptable CAs for a host/domain
CNAME	5	RFC 1035^[1]	Canonical name record	Alias of one name to another: the DNS lookup will continue by retrying the lookup with the new name.
LOC	29	RFC 1876	Location record	Specifies a geographical location associated with a domain name
MX	15	RFC 1035^[1] and RFC 7505	Mail exchange record	Maps a domain name to a list of message transfer agents for that domain
PTR	12	RFC 1035^[1]	Pointer record	Pointer to a canonical name . Unlike a CNAME, DNS processing stops and just the name is returned. The most common use is for implementing reverse DNS lookups , but other uses include such things as DNS-SD .
NS	2	RFC 1035^[1]	Name server record	Delegates a DNS zone to use the given authoritative name servers
SRV	33	RFC 2782	Service locator	Generalized service location record, used for newer protocols instead of creating protocol-specific records such as MX.
TXT	16	RFC 1035^[1]	Text record	Originally for arbitrary human-readable <i>text</i> in a DNS record. Since the early 1990s, however, this record more often carries machine-readable data , such as specified by RFC 1464 , opportunistic encryption , Sender Policy Framework , DKIM , DMARC , DNS-SD , etc.
SPF	99	RFC 4408	RFC 7208	SPF (99) (from RFC 4408) was specified as part of the Sender Policy Framework protocol as an alternative to storing SPF data in TXT records, using the same format. It was later found that the majority of SPF deployments lack proper support for this record type, and support for it was discontinued in RFC 7208 . ^{[14][15]}

CLOUDFLARE DNS

- Add site
- Select record type
- Type 'Name' and 'Value'
- Apply your change to global DNS

百度云 → 全球 Cloudflare



+ Add site Support

Overview Analytics DNS Crypto Firewall Access Speed Caching Workers Page Rules Network Traffic Stream Custom ... Apps Scrape S...

DNS

Manage your Domain Name System (DNS) settings

DNS Records

A, AAAA, and CNAME records can have their traffic routed through the Cloudflare system. Add more records using this form, and click the cloud next to each record to toggle Cloudflare on or off.

⚠ An A, AAAA, CNAME, or MX record is pointed to your origin server exposing your origin IP address.
⚠ An MX record was not found for your root domain. An MX record is required for mail to reach ****@cstu.gq**** addresses.

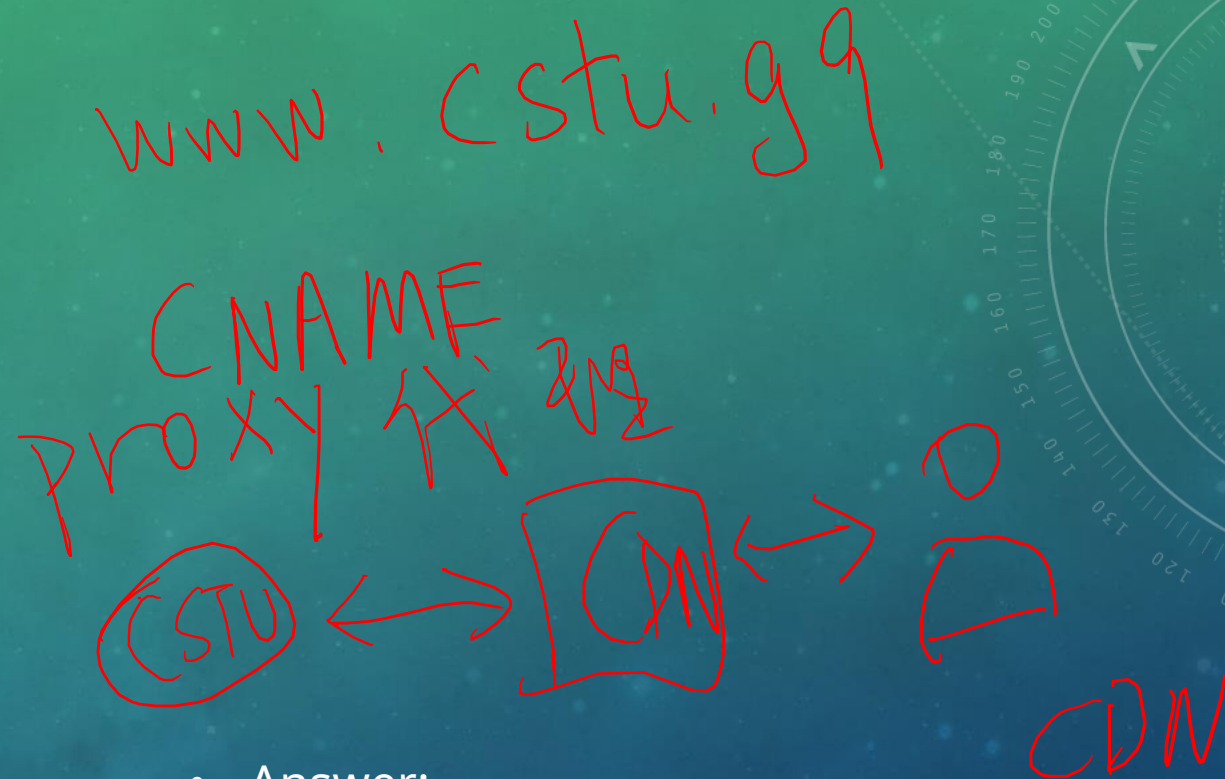
Search DNS records

Record type	Name	Value	TTL	Status
A	archive	points to [redacted]	Automatic	Cloudflare On
AAAA	cstu.gq	points to [redacted]	2 minutes	Cloudflare Off
CNAME	[redacted]	is an alias of ziyuan.baidu.com	Automatic	Cloudflare Off
MX	branches	is an alias of archive.cstu.gq	Automatic	Cloudflare On

DNS and HTTP proxy (CDN)

TRY

- Analyze www.cstu.gq
- Cloudflare CDN, redirect request to cstu.gq



- Answer:

CNAME, points to cstu.gq and proxy by Cloudflare
Top-level domain: gq
Second-level domain: cstu
Host name: www

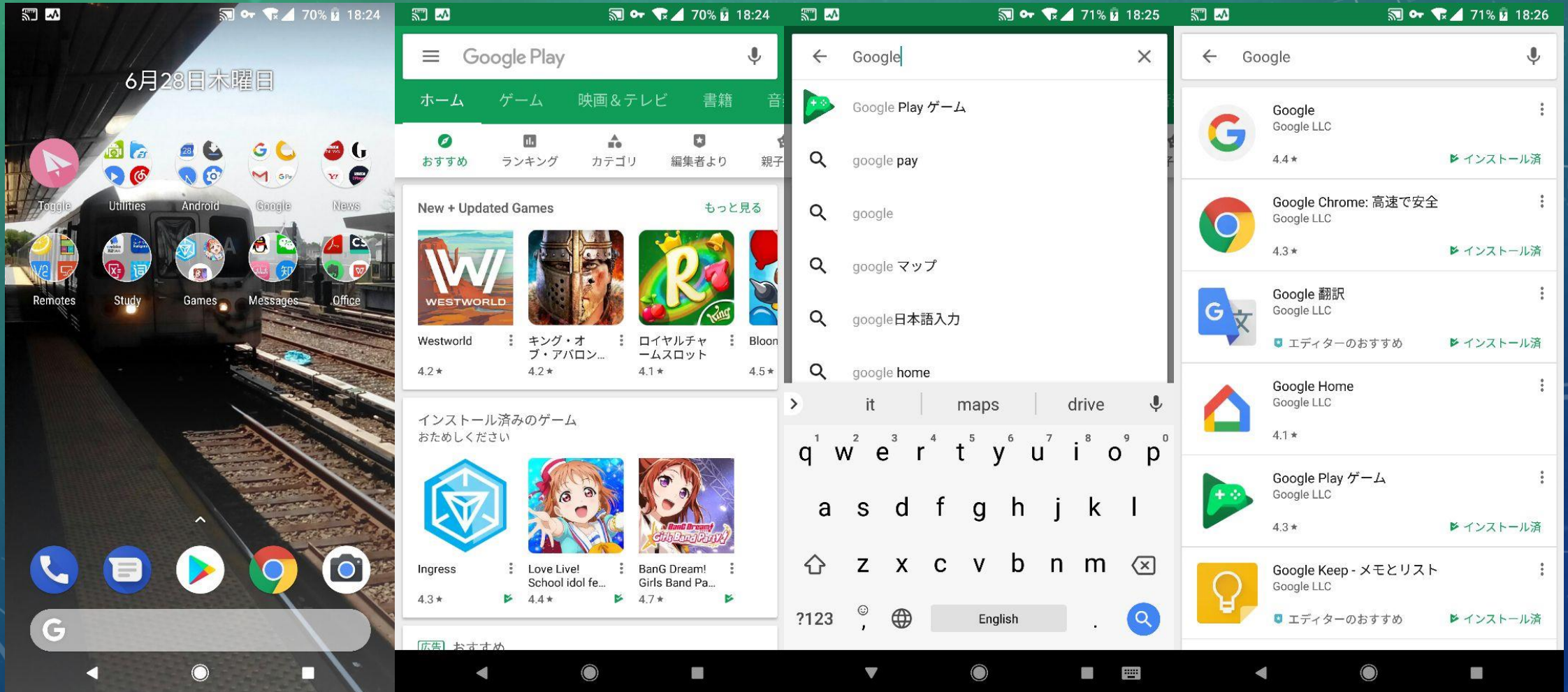
CRYSTAL GIT

- Based on GitLab
- Open now for you to register
- Go to <https://git.cstu.gq!>
- Explore these days


ANDROID

OPERATING SYSTEM USAGE

INSTALL APPS



INSTALL APPS



Google Home
Google LLC
PEGI 3

インストール

#5 ツール トップランキングランキング

5000 万
ダウンロード数


4.1
★★★★★
479,488 人
ツール

類似のアイテム

Chromecast、Chromecast Audio、Google Home デバイスのセットアップと操作

[詳細はこちら](#)

Google Home Simple setup Browse and play



Google
Google LLC
PEGI 3

アンインストール 開く

広告が表示されます

10 低
ダウンロード数

7,845,923 人
★★★★★
ツール

類似のアイテム

外出先でもスマートに検索しよう。

最新ニュース

- 検索ページのデザインを改善しました
- 新しい Doodle をアプリ内で表示されるようにデザインしました
- オフラインの音声操作（音楽を再生する、Wi-Fi を

GOOGLE ASSISTANT PRESENTATION

- You can ask me for Crystal SSR

ADB COMMANDS

- adb devices // list all connected devices
- ~~adb push~~ [-p] <local> <remote> // copy file/dir to device ('-p' to display the transfer progress)
- ~~adb pull~~ [-p] [-a] <remote> [<local>] // copy file/dir from device ('-p')
- adb shell [command]
- adb install [-ltsd] <file>
- ~~adb install-multiple~~ [-ltsdp] <file...>
 - (-l: forward lock application)
 - (-r: replace existing application)
 - (-t: allow test packages)
 - (-s: install application on sdcard)
 - (-d: allow version code downgrade)
 - (-p: partial application install)

PS Lite
adb backup -all

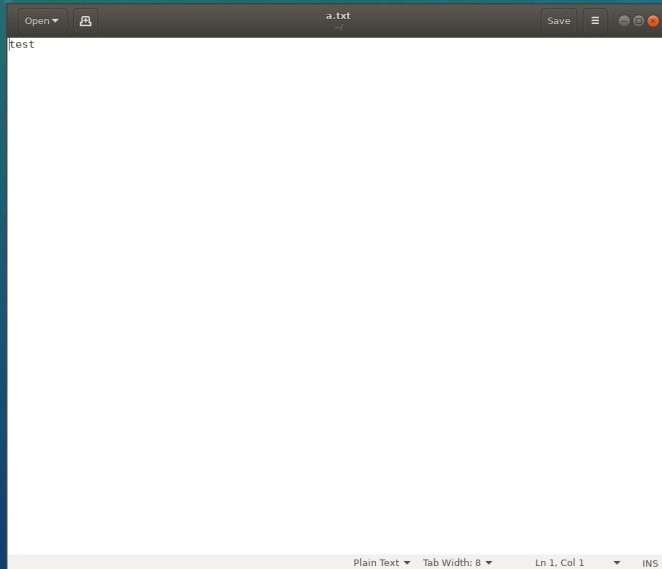
- adb uninstall [-k] <package> // '-k' means keep the data and cache directories
- adb backup [-f <file>] [-apk|-noapk] [-obb|-noobb] [-shared|-noshared] [-all] [-system|-nosystem] [<packages...>]
 - Write an archive of the device's data to <file>.
 - If no -f option is supplied then the data is written to "backup.ab" in the current directory.
 - (-apk|-noapk enable/disable backup of the .apks themselves in the archive; the default is noapk.)
 - (-obb|-noobb enable/disable backup of any installed apk expansion (aka .obb) files associated with each application; the default is noobb.)
 - (-shared|-noshared enable/disable backup of the device's shared storage / SD card contents; the default is noshared.)
 - (-all means to back up all installed applications)
 - (-system|-nosystem toggles whether -all automatically includes system applications; the default is to include system apps)
 - (<packages...> is the list of applications to be backed up. If the -all or -shared flags are passed, then the package list is optional. Applications explicitly given on the command line will be included even if -nosystem would ordinarily cause them to be omitted.)

ADB COMMANDS

- `adb restore <file>` // restore device contents from the <file> backup archive
- ~~`adb root`~~ // restarts the `adbd` daemon with root permissions → ADB Debug
- <https://developer.android.com/studio/command-line/adb#issuingcommands>

TRY

- Guess the effect.
- Answer:



```
turx@TURX:~$ export DISPLAY=:0
```

```
turx@TURX:~$ gedit a.txt
```

gnome editor



Thanks for your listening

It ends evening

The background features a gradient from light green at the top to dark blue at the bottom. On the left side, there are several concentric circular patterns and a large arc with a scale ranging from 140 to 260. The scale is marked with numbers every 10 units. The overall design is modern and technical.

SOFTWARE USAGE

CRYSTAL SUMMER CAMP 2018

CRYSTAL EDUCATION – TURX