

# UBUNTU KYLIN PRACTICE ON APPLICATION CONSTRUCTION FOR LINUX ECOSYSTEM



Xiaodong Liu

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# Ubuntu Kylin Open-Source Operating System



# Ubuntu Kylin

Ubuntu Kylin is an open-source Linux distribution based on Ubuntu

Since 13.04, Ubuntu Kylin became one of the official Ubuntu flavor

A global open-source project led by the Ubuntu Kylin community



# Ubuntu Kylin Desktop Team



The Ubuntu Kylin team, headed by Jack Yu, consists of 70 programmers, focusing on kernel, system runtime, desktop environment, desktop applications and system security.



## Goal of Ubuntu Kylin

A more suitable Linux open-source desktop operating system for Chinese users

Windows-like operating experience for users with Linux operating system

## Goal of Ubuntu Kylin Community

Spreading open-source ideas to China

Spreading Chinese ideas to the world

# Ubuntu Kylin

A total release of **14** distributions, including 3 LTS versions

Ubuntu Kylin  
1304



Ubuntu Kylin  
1504



Ubuntu Kylin  
1704



Ubuntu Kylin  
1804



Ubuntu Kylin  
1904



Ubuntu Kylin  
1404



Ubuntu Kylin  
1604



Ubuntu Kylin  
1710



Ubuntu Kylin  
1810

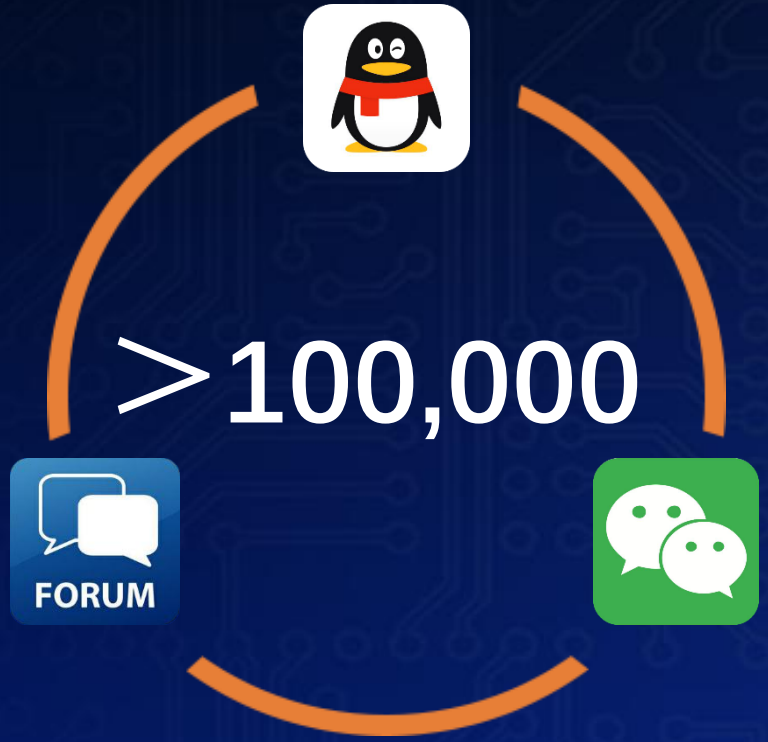


Ubuntu Kylin  
1910



# Community

Distribution release and open-source activities: 30+ cities, 80+ events



> 25,000,000

[download.ubuntukylin.com](http://download.ubuntukylin.com)





# Release Party





# Community Contribution

More than **7800** commits to the international open-source community such as Linux Kernel, Debian, Ubuntu, OpenStack, Ceph, etc.

Contributed **45** projects such as UKUI desktop environment, kylin-assistant, qim-panel to Debian, Ubuntu, etc.

More than **1000** developers registered in the Developer Center.

# Community Contributors

Linux Kernel

| 8 Linux Kernel Contributors

OpenStack

| 4 Core Reviewers ( Searchlight, Rally, Senlin, Puppet )

| 1 Project Team Leader ( Puppet )

Debian

| 1 Debian Maintainer

Ubuntu

| 1 PPU Developer, 1 Ubuntu Member



Linux  
Kernel



Open  
Stack



Debian



Ubuntu



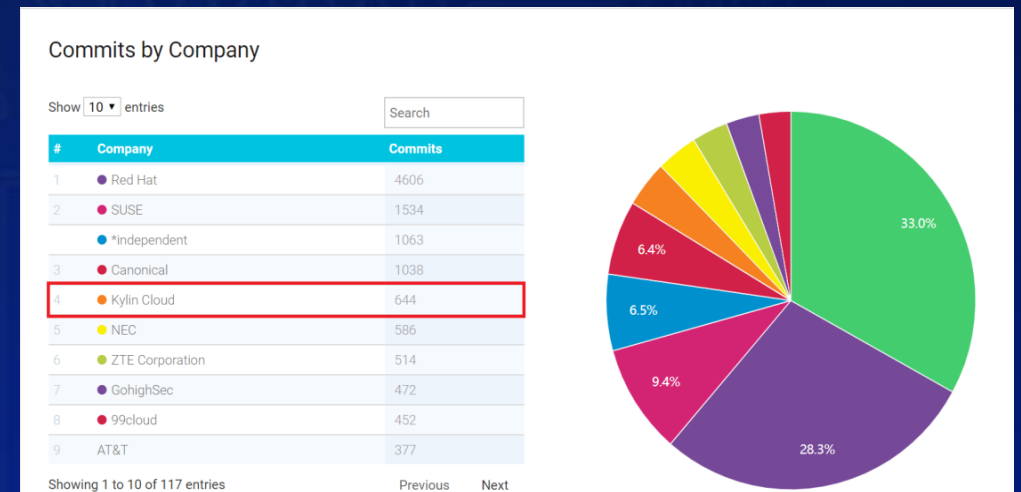
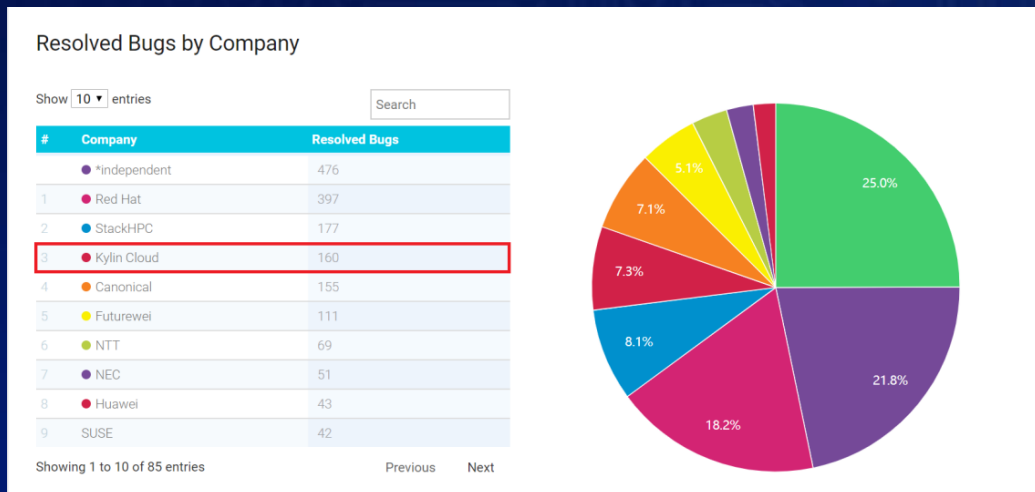
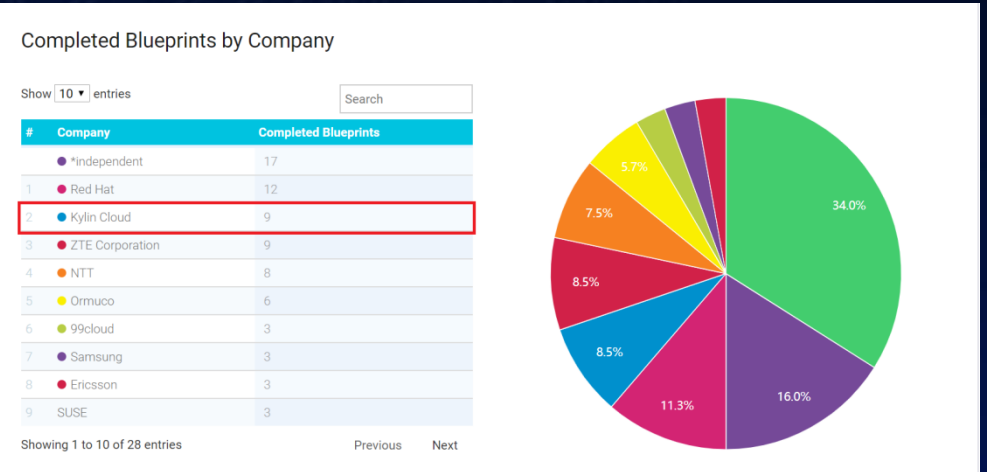
# OpenStack Community Contribution

Train version(2019.10.16 Released)

Submitted 644 Commits, Global Contribution **No. 4**, China **No. 1**

Resolved 160 Bugs, Global Contribution **No. 3**, China **No. 1**

Completed 9 Blueprints, Ranked as BP Global Contribution **No. 2**, China **No. 1**



# UK UKUI



# UKUI

A desktop environment designed and developed by Ubuntu Kylin Team.

Provide Windows-like interactions that give users a more cordial and friendly experience



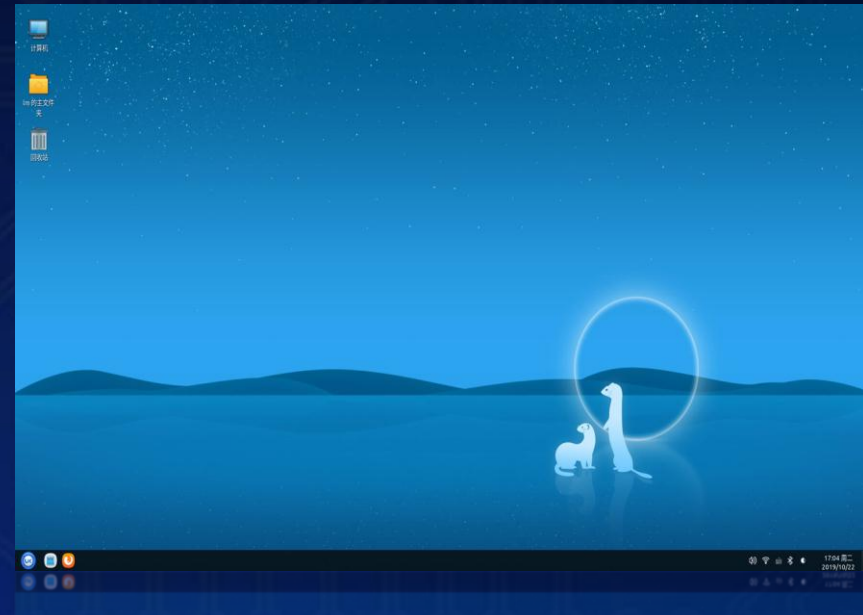
# UKUI History

UKUI 1.0



Released in 2013, mainly followed Ubuntu with modified theme color and icons.

UKUI 2.0



Released in 2017, a self-developed desktop environment with Windows user experience.



Computer



lm's Home



Trash

# Intuitive and Easy-to-use

- A simple and intuitive interface adapted to the habit of users.
- Frequently used operations are placed in most easily accessed position.



Ethernet Wifi

kylinos\_2.4GHz  
Safe Connected

Wifi Networks

xxxxx  
Safe

TP-LINK\_ZHIXIN  
Safe

xpj-snf  
Safe

kylin426  
Safe

Enabled Enabled  
Network Wifi

Advanced

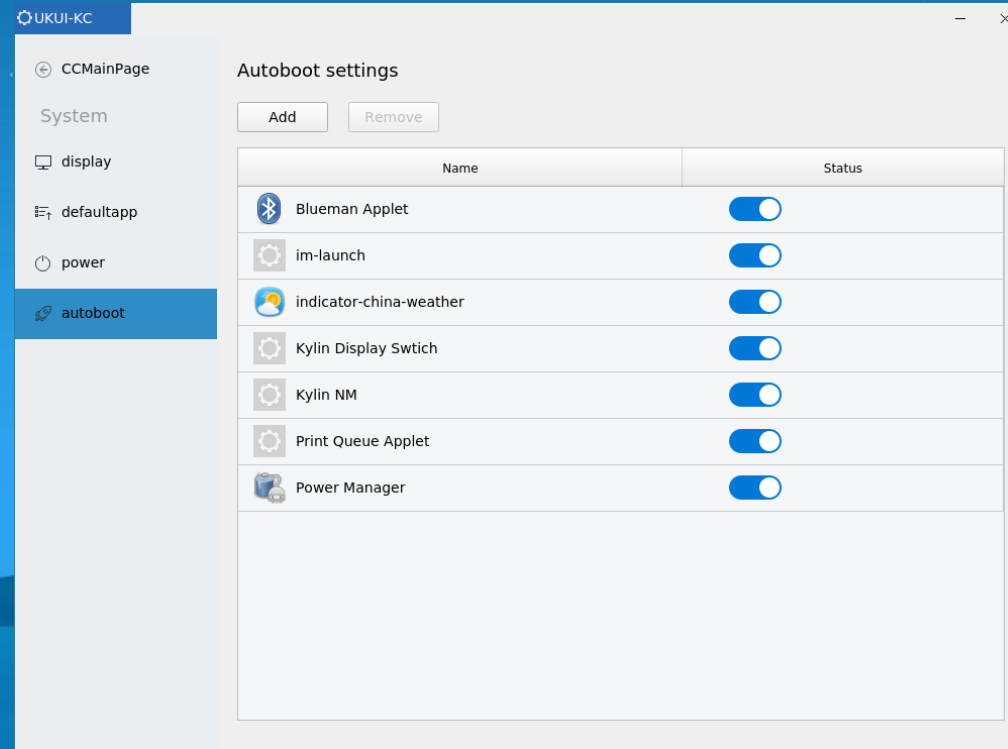


kylin-nm



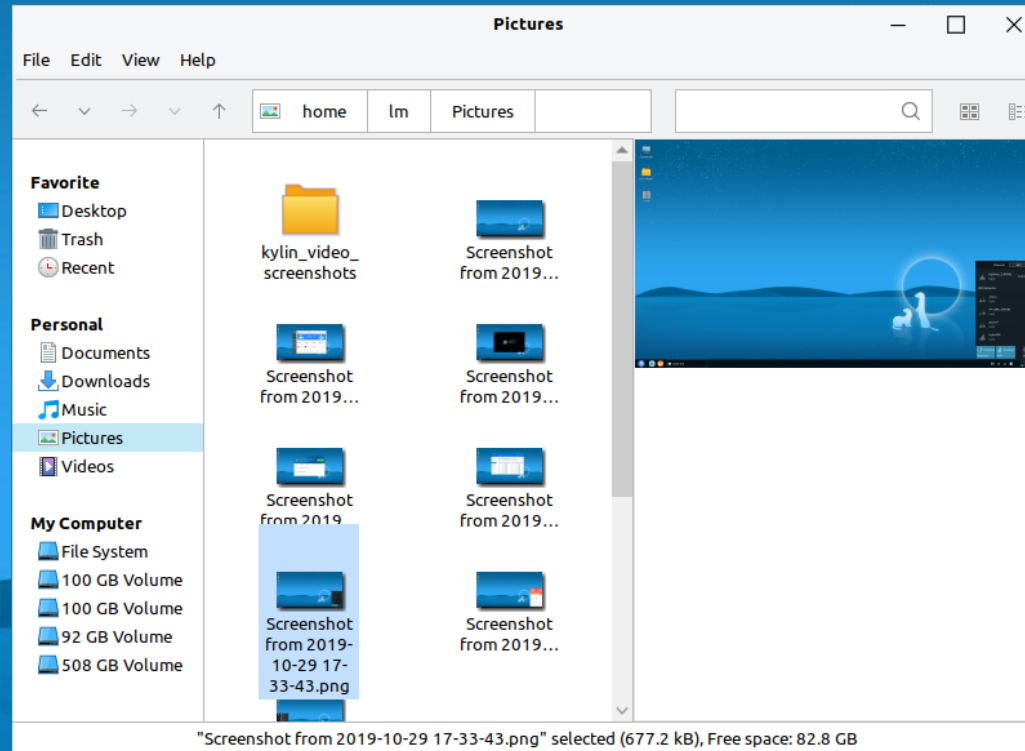
# Powerful and Stable

- Optimized loading speed based on component plugin mode.
- All common functions work just out of the box.



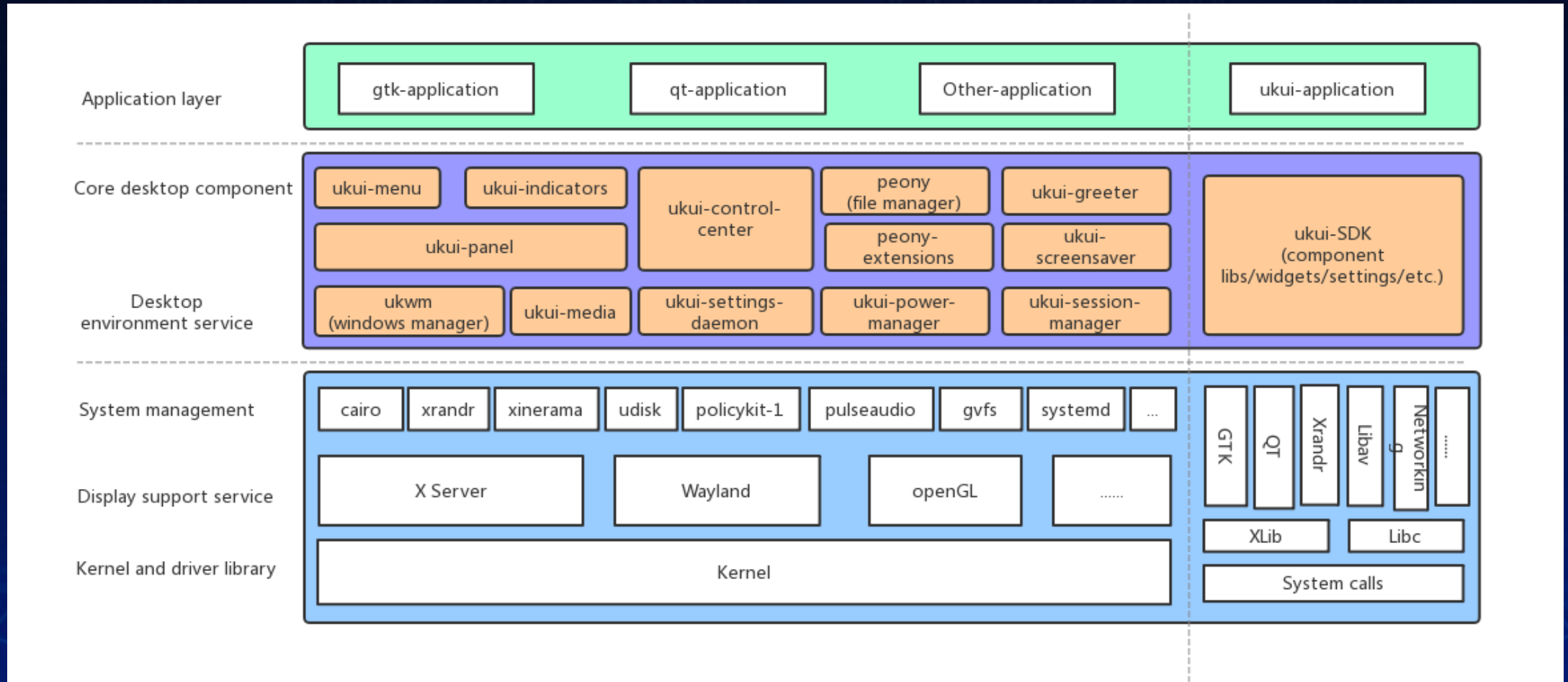
# Compatible and Scalable

- Unified interfaces to support application compatibility.





# UKUI2.0 Architecture



# Development Framework and Language



## Development Framework

Object-oriented idea based on GObject, encapsulating different application instances and providing better scalability.

DBus communication mechanism, providing data interaction between UKUI components

## Development Framework

Mainly based on Gtk+, some modules written by Qt, compatible with system theme, providing better visual effects.

Plugin based on Python, providing fast iteration capabilities.



## Website

| <http://www.ukui.org>

## Github

| <https://github.com/ukui/>

## PPA

| <https://launchpad.net/~ubuntukylin-members/+archive/ubuntu/ukui>

## Package Repository

| Ubuntu, Debian

| One-click installation into multiple Linux distributions





# UKUI3.0 Plan

Improved user experience

Convenient application development



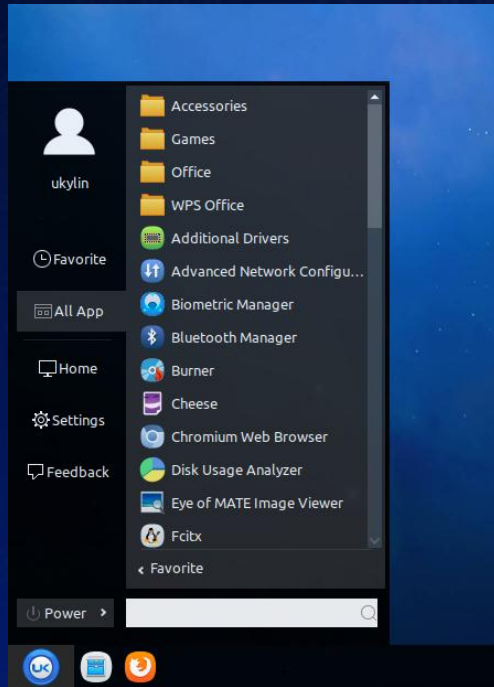
UKUI 2.0 PC

UKUI 3.0 PC+Mobile Terminal

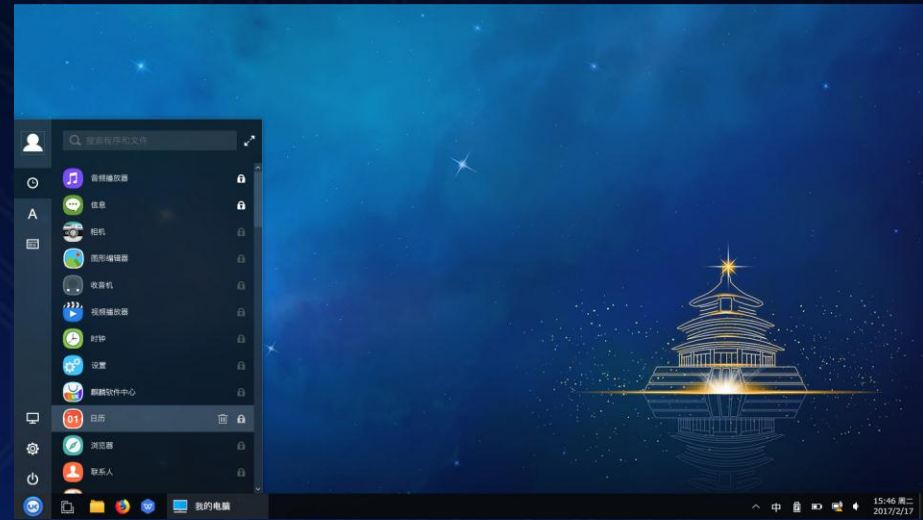


# UKUI3.0 Plan

Balance between visual effects and functional availability



UKUI 2.0



Normal

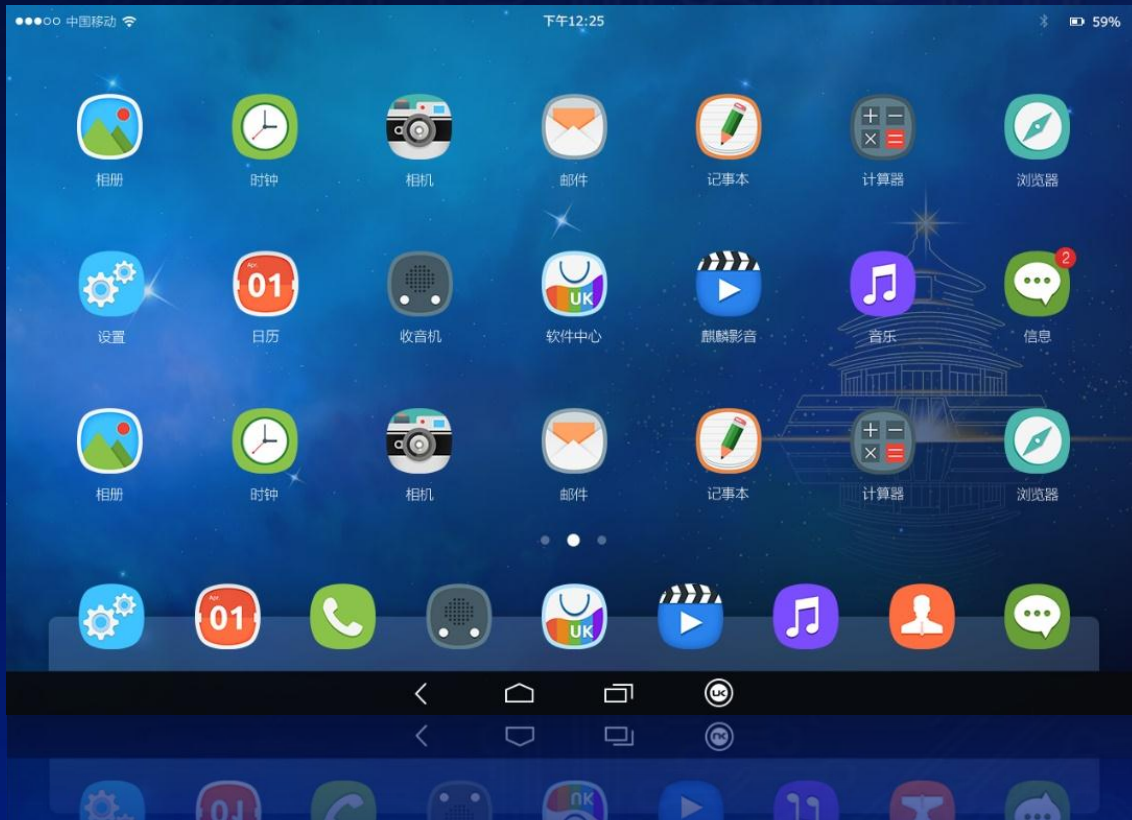


UKUI 3.0

FullScreen

# UKUI3.0 Pad Display

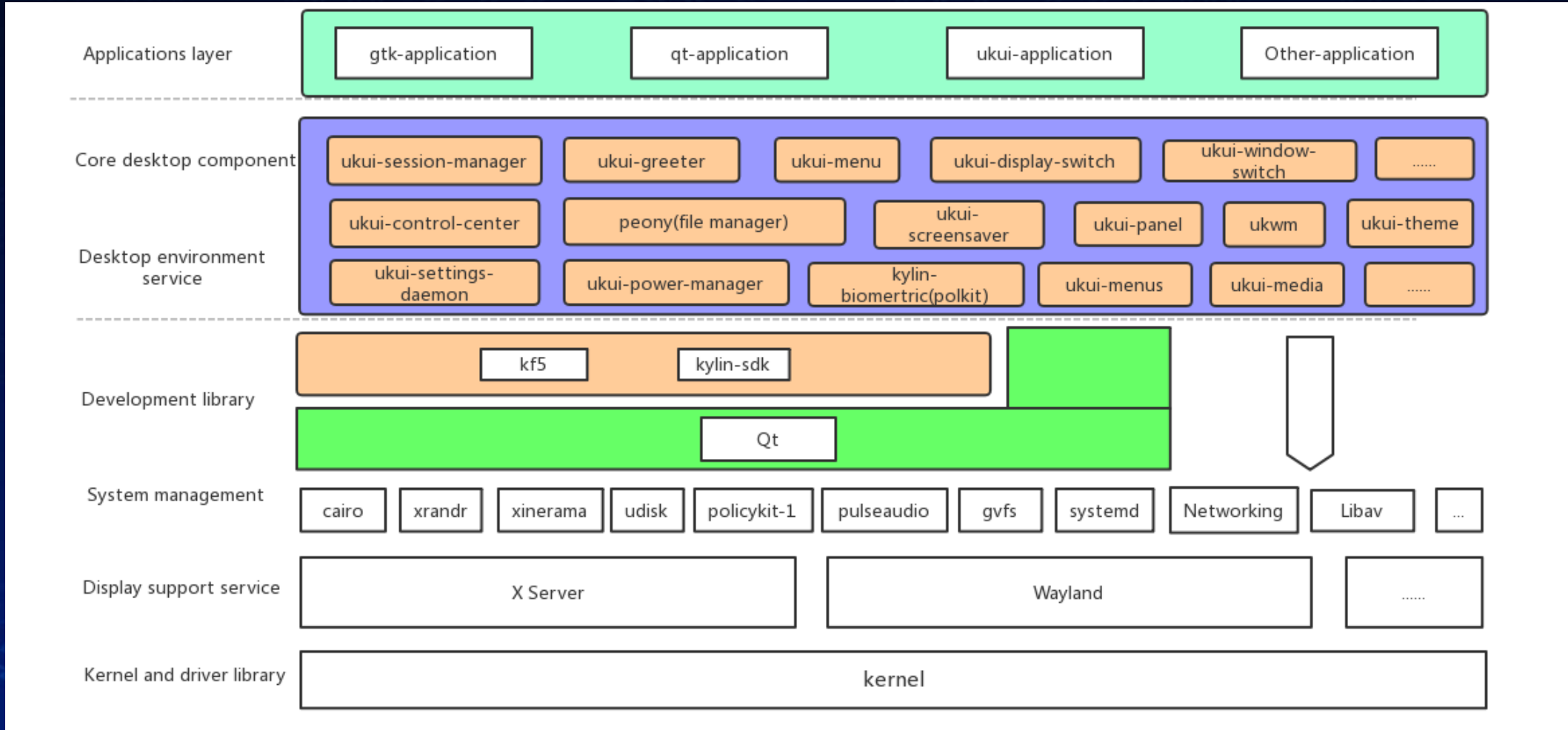
Compatible with touch screen operations, such as zooming, sliding, multi-touch etc.







# UKUI3.0 Architecture



# Application Ecosystem

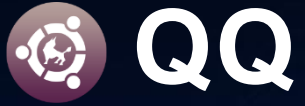


**Third-party Apps**

**Co-Developed Apps**

**Self-Developed Apps**



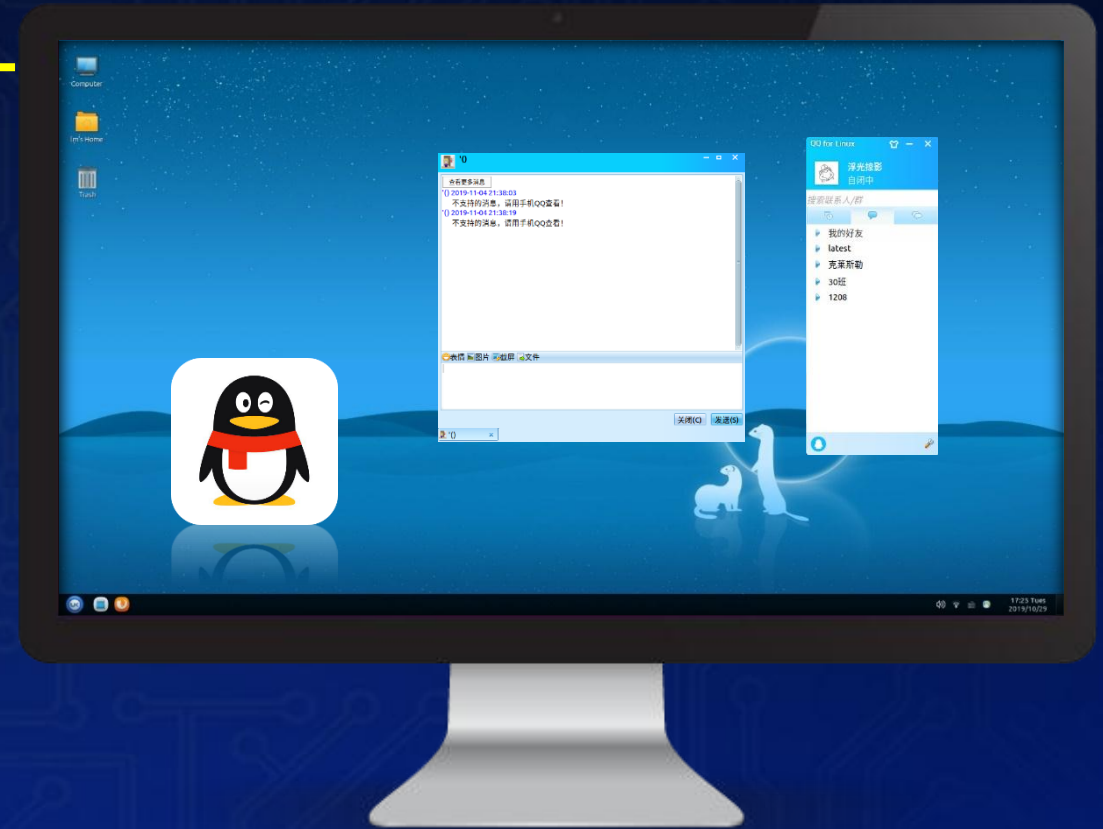


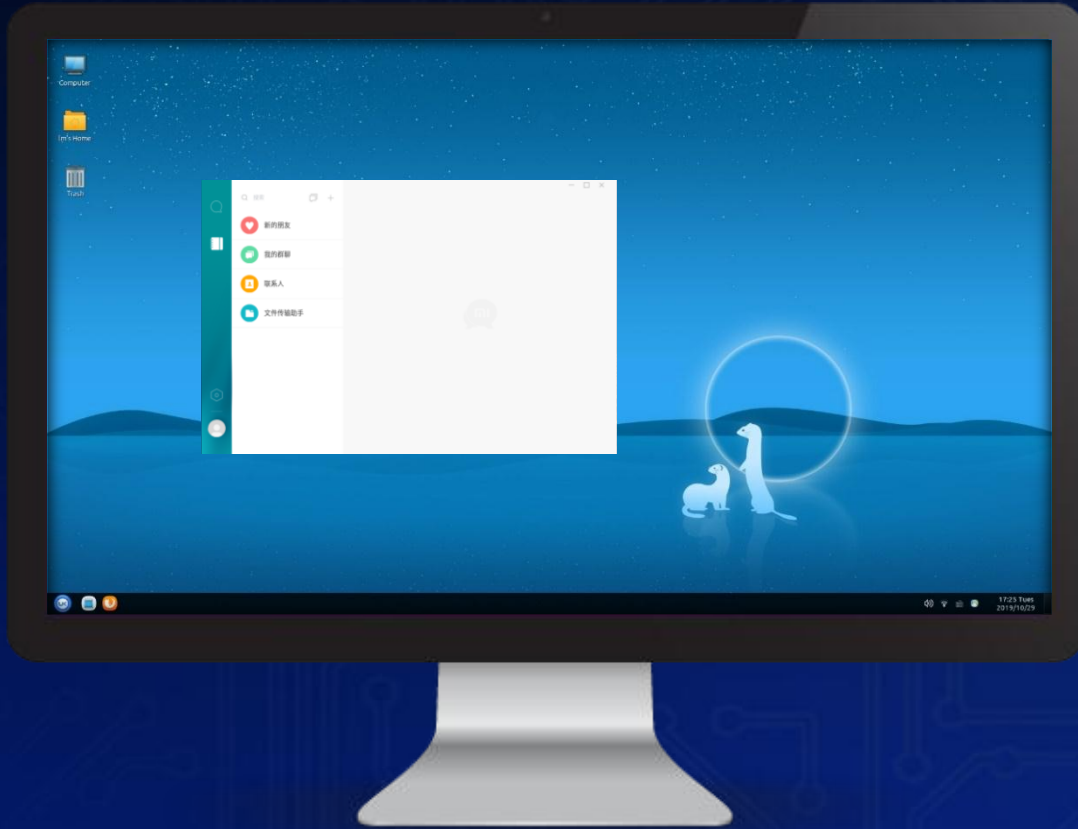
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By Tencent Inc.

Support x64, ARM64, MIPS64  
architectures

Optimized instant messaging  
capabilities

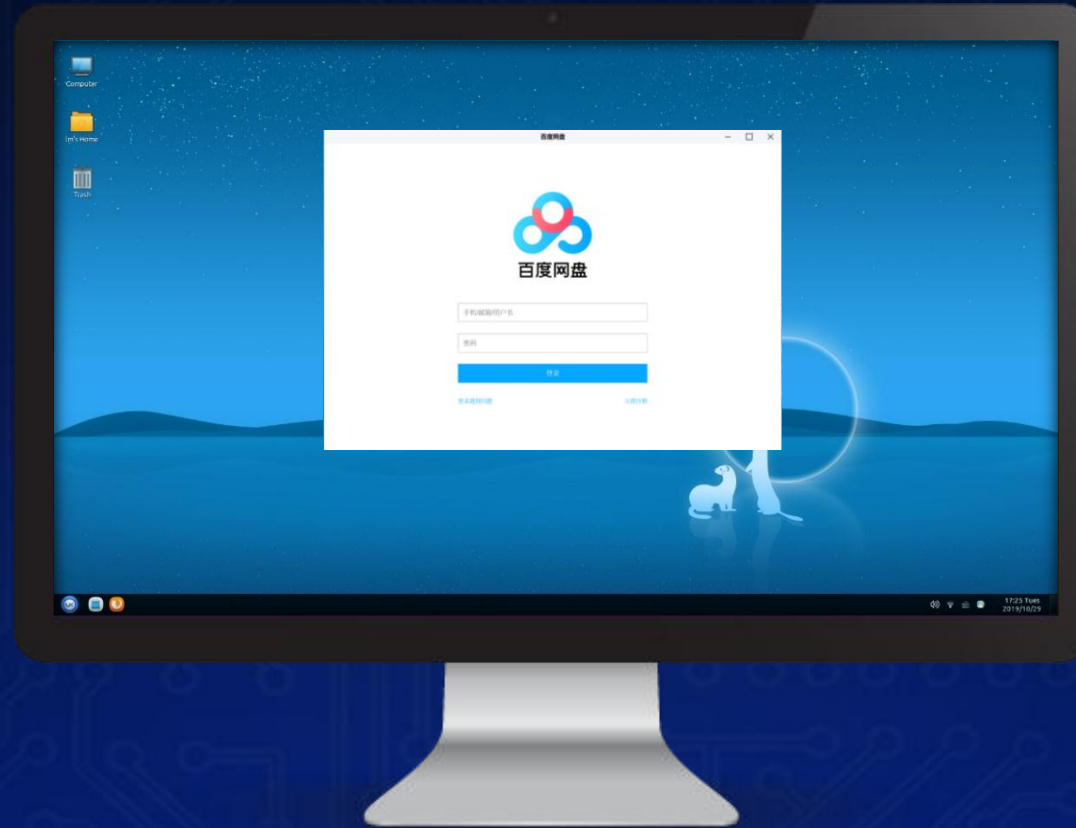




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By Xiaomi Technology  
A cross-platform instant  
messaging software for free

# Baidu Netdisk



By Baidu Inc.

Providing services of file backup, syncing and sharing on the web

# More Applications



WeChat



WiZ



DingTalk



MockingBot



XMind





Third-party Apps

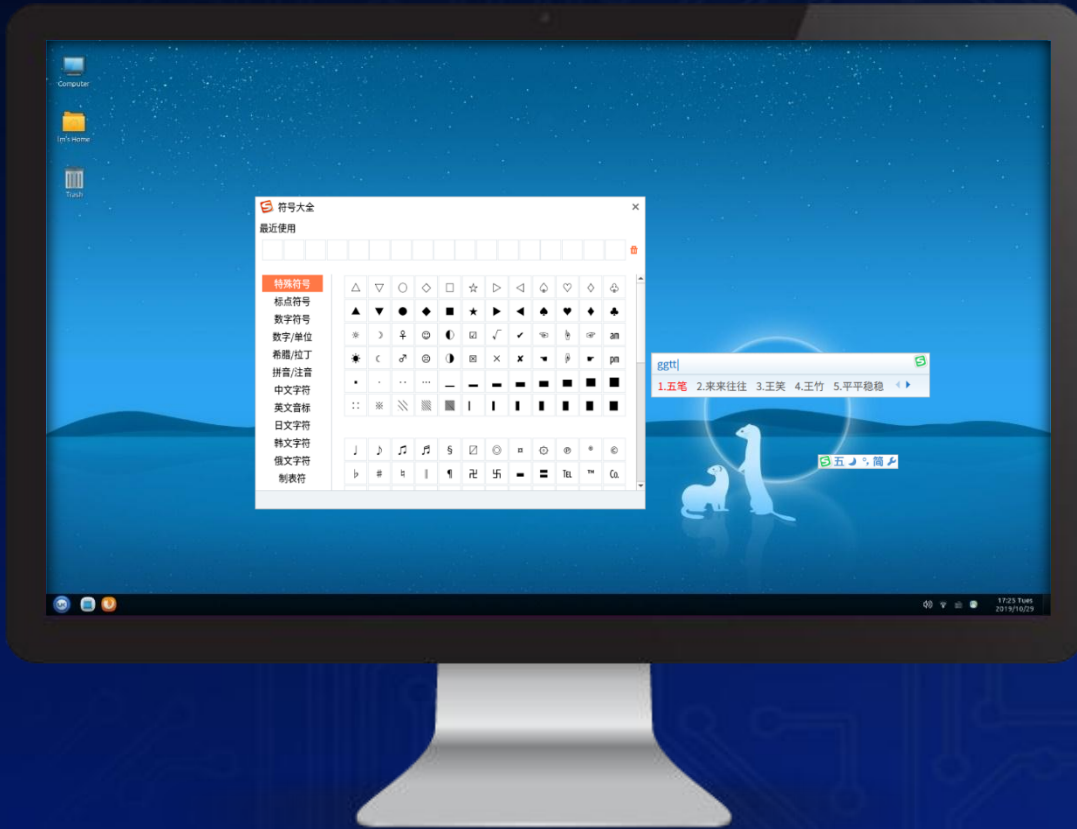
Co-Developed Apps

Self-Developed Apps





# Sogou Input



Co-developed by Ubuntu Kylin and Sogou Inc.

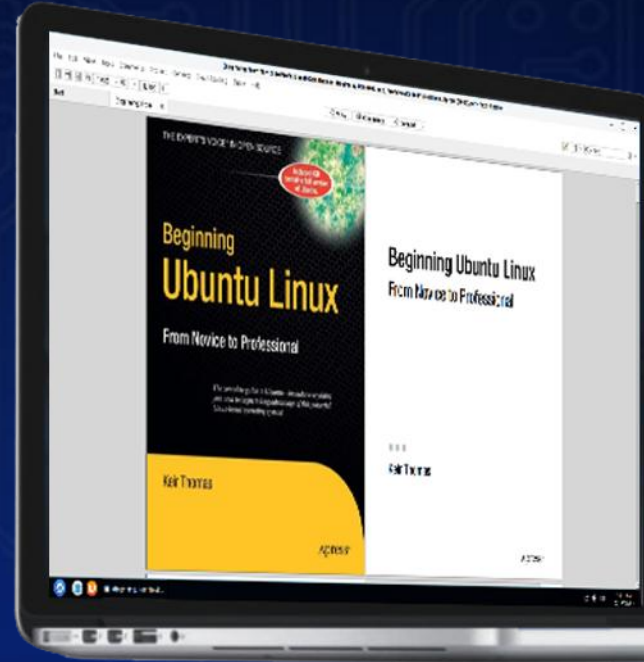
Provide smart pinyin, automatic matching, diversified skin functions

# Office Suite

WPS Office



Foxit Reader





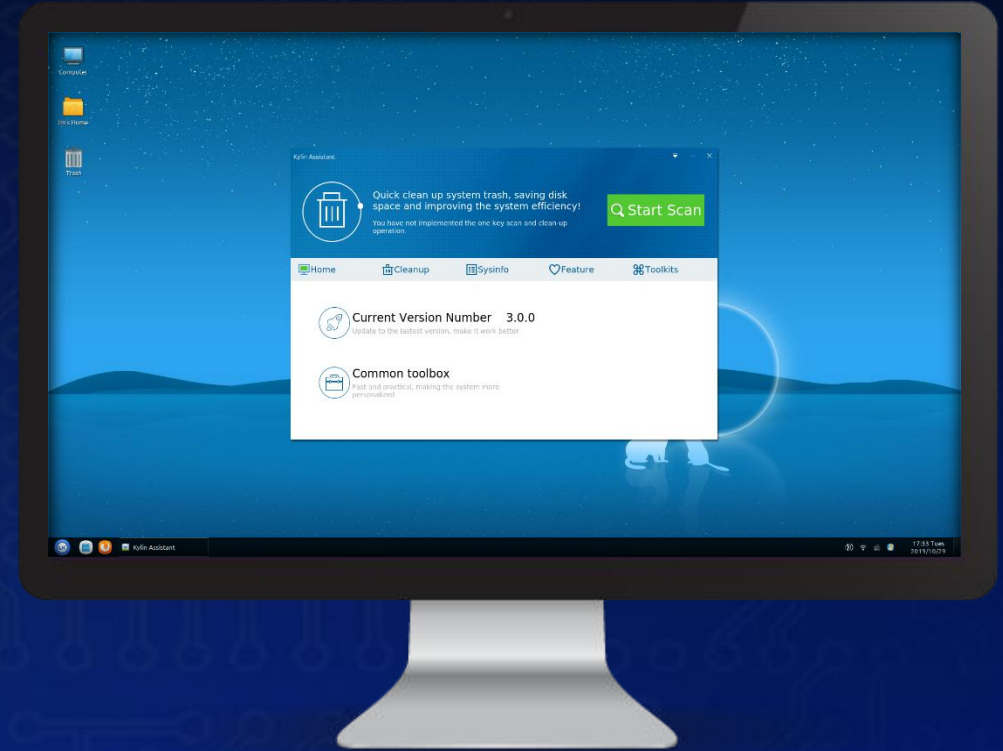
Third-party Apps  
Co-Developed Apps  
**Self-Developed Apps**



# Kylin Assistant

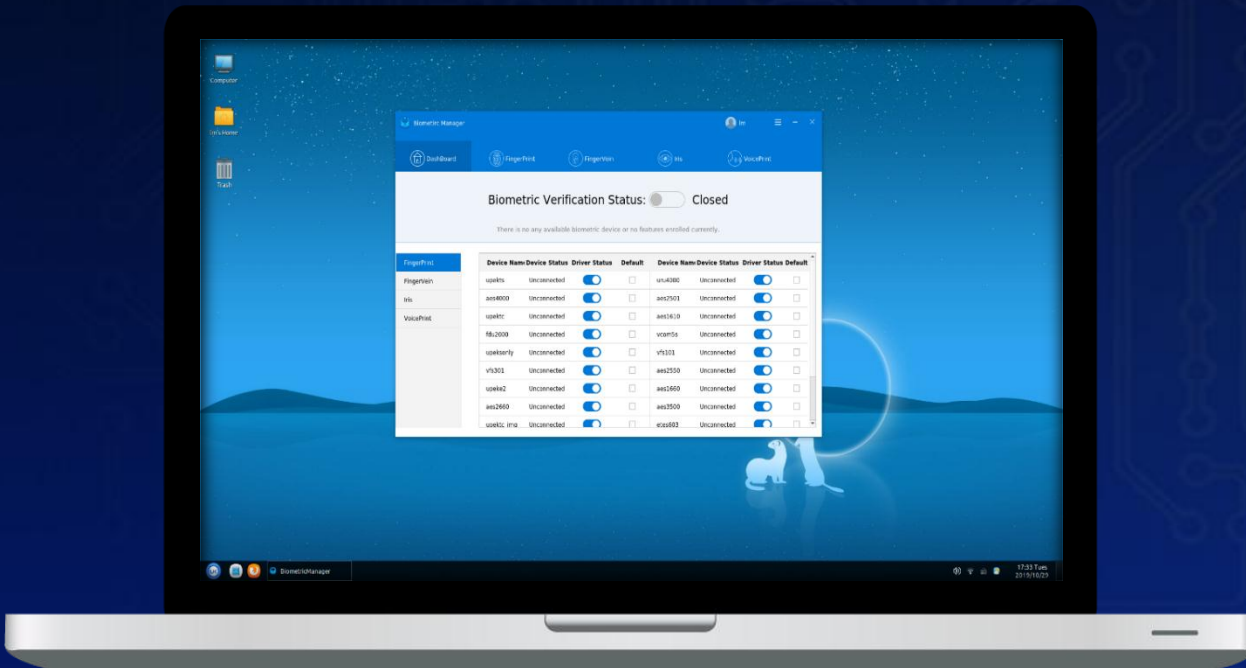
A system management and configuration tool

Providing system information display, one-click cleaning, system customization, etc.



Code Address : <https://github.com/ukui>

# Kylin Biometric Manager



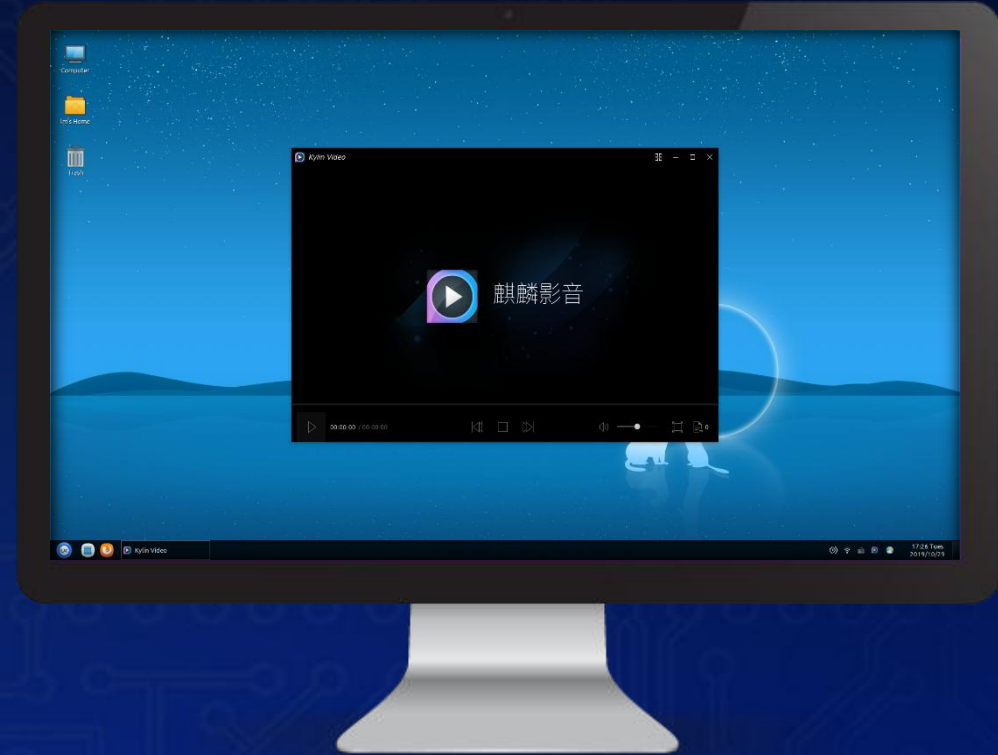
Supports biometric identification and authentication of fingerprints, finger veins, irises, voiceprints, etc.

Code Address : <https://github.com/ukui>

# Kylin Video

Support X86 and ARM  
platforms

Support video files in  
almost all formats

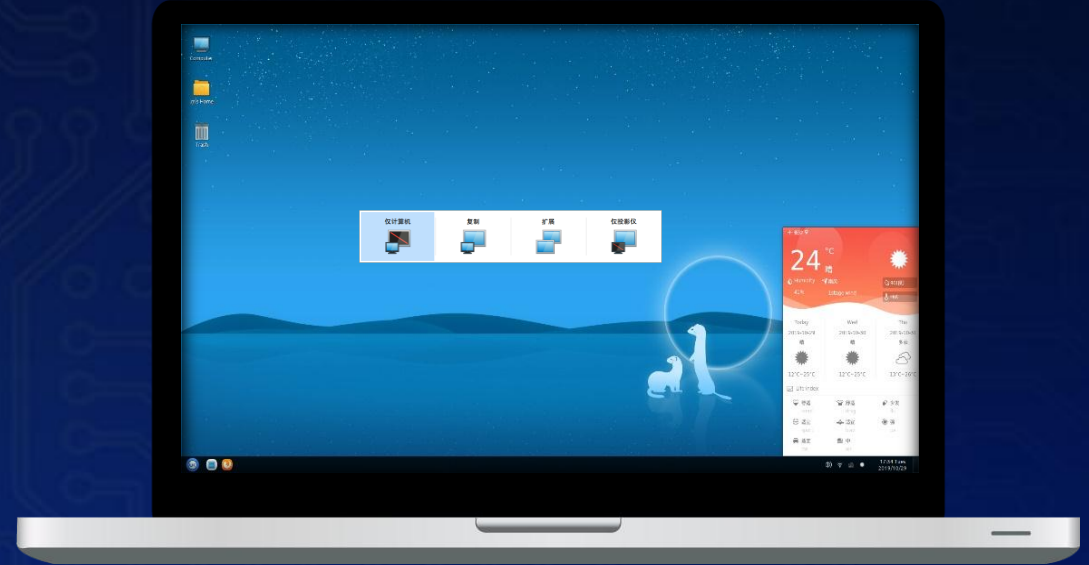


Code Address : <https://github.com/ukui>

# Kylin Series Plugin



**Kylin Calendar** : Chinese calendar  
**Kylin NM** : fast network setup tool



**Kylin Weather** : weather forecast  
**Kylin Projection** : Switch projection mode

# Kylin Software Center



Integration of 2000 apps  
One-click installation

Code Address : <https://github.com/ukui>





# Post Plan



KYDROID

## Run Android APPs on Linux

Kydroid 2.0 on ARM64 Released

Kydroid on X86 in progress

# Post Plan

**Support Massive  
Android Apps**

App starts in 1 second



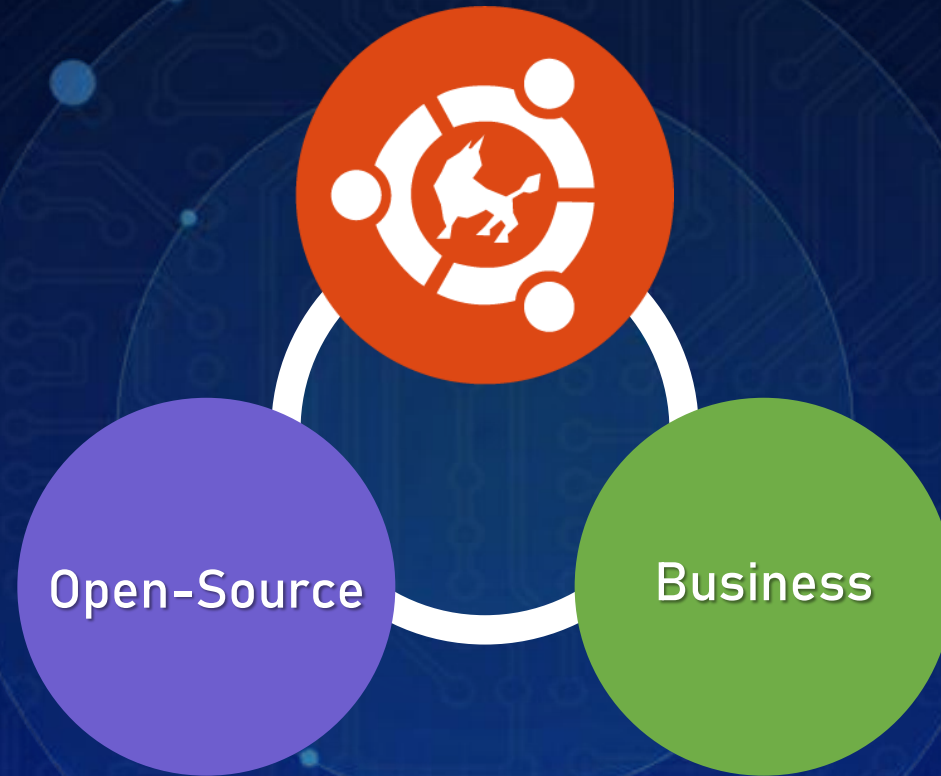
**Hardware  
Acceleration**

Almost no performance loss

**Free Installation  
of Apk**



# Summary



**Application Ecosystem**

**Thank You**



THE END