

A POTENT NEW FORCE IN MOBILE

Ubuntu on smartphones delivers a strikingly beautiful user experience that scales smartly from the phone to the tablet and desktop, with a vibrant network of developers and a rich app and content marketplace front and centre.

Early reviews have been positive: CNet said "It's elegant, thoughtful, and versatile, while remaining beautifully straightforward. Compared to the messy Android copycats... it's by far the strongest potential rival to Android, iOS, and Windows Phone. In fact, I prefer it to iOS, which long ago lost its shine, ...I'd happily lay down my own cash for an Ubuntu phone."

The smartphone platform market is well established but Ubuntu delivers something fresh with its vision of device convergence and an open, content-centric home screen that enables operators and manufacturers to promote their marketplaces directly without fragmenting the platform.

Techradar said "Ubuntu's concentration on content over control makes it an OS that is clearly designed for the mass market."

The combination of convergence, great design and an open marketplace makes Ubuntu the ideal choice for next-generation devices. Ewan Macleod, Founder and Editor of Mobile Industry Review said "The market is hungry for something better than today's polarised mobile phone OS choice. At one end you have iOS with its glossy, photo realistic finishes and complexity. At the other end sits Windows Phone, which is flat, over-simplified and gets boring quickly. Meanwhile, Android offers a scattered, fragmented experience that is often frustrating and fails to make full use of many devices' capabilities."

DEVELOPER-FRIENDLY

Ubuntu is the number one platform for cloud and web development, so developers know and love the system already.

Our global community of developers has created a set of core open apps.

Alongside everyday items such as calendar, clock, music player, browser, contacts, and games like Sudoku, we're working closely with partners like Facebook,

Twitter and Evernote, and with the open source community to develop a wide range of apps for the phone.

Developers have multiple options to bring an app to Ubuntu. They can reuse their web skills to create apps with HTML5, Javascript and CSS, using Apache Cordova to integrate sensor and camera data. For a more sophisticated native feel, QML is available to develop slick and striking apps easily, with engines in C++ or Go.

Game developers already know and support Ubuntu – companies like Warner Bros, Electronic Arts, Valve and Unity Technologies all target Ubuntu as a credible alternative to Windows 8 on the PC. Open GL/GLES compatibility ensures cutting edge games run beautifully on a phone OS specifically optimised for gaming.

Everything developers need

We've got tools and guidance to help developers at every stage of designing, building and testing a beautiful app or scope.

Build functional, appealing apps with Ubuntu's developer tools, SDK, guidelines and tutorials: **developer.ubuntu.com**

Ensure apps look stunning and flow beautifully, just like Ubuntu, with design advice and guidelines: design.ubuntu.com/apps

Install Ubuntu to a phone or tablet for app testing: wiki.ubuntu.com/Touch/Install



"You can make existing web applications installable on the Ubuntu phone almost instantly, and you can create amazing, fast and beautiful native apps with the SDK. Either way, you'll be part of a real revolution – on the smartphone, tablet and desktop."

Oliver Ries Engineering Director, Ubuntu Technologies and Tools



"We don't just have common UI elements – we really have one OS for all form factors."

Rick SpencerVP, Ubuntu Engineering

CONVERGENCE

The promise of a single OS for all device form factors – desktop, tablet, TV and phone – is unique to Ubuntu. "We don't just have common UI elements – we really have one OS for all form factors," said Rick Spencer, who leads the team that delivers Ubuntu on a metronomic six-month cadence across the entire computing spectrum, from handhelds to supercomputers.

Providing a common platform across all these devices has a great appeal for enterprise users who relish the opportunity to combine the phone with the thin client or desktop in one highly secure device. They manage their Ubuntu smartphones using exactly the same tools they use for Ubuntu on the server, desktop and cloud.

For developers it's a revolution. Create one application, then publish it across phone, tablet and desktop. One upload for the developer, one download for the user.

Ubuntu's common OS code, responsive design, clever app confinement and the coherence of the Unity interface across form factors ensures apps will run beautifully regardless of device.

In short, Ubuntu is the new favourite platform for phones – offering a designer experience in the mid-market, and a game-changing convergence of PCs and phones at the high end.



DESIGNING FOR CONVERGENCE

Ubuntu was designed from the start for a world of phones, tablets, PCs and other devices.

"The Ubuntu screen is kept clear to provide totally immersive experiences, rather than cluttering the screen with controls. Ubuntu uses every edge of the screen to give its users a natural and fast way to direct the device and the application," explains Marcus Haslam, Head of Design for Ubuntu.

The result is a coherent and distinctive family of interfaces, each offering a delightful user experience.

"The Ubuntu interfaces are responsive – the same components reflow and rescale in a natural way across the form factor continuum, taking advantage of the characteristics of each device without compromising the common user experience. Users get a real sense of fluidity when using a phone, and they retain the agility they need on the desktop when using a mouse. We are proud of achieving a more consistent experience across devices than any other OS," concludes Marcus Haslam.











VITAL VISUALS

Being visually stunning was another key goal. The resulting attention to detail is evident throughout the interface. Unique double bezier curves that characterise the Ubuntu font are used on the rounded corners of the icons, for example, creating harmony across all aspects of the interface.

Artists specialising in data visualisation have created dynamic, data-driven infographics that reflects the life of the phone user, resulting in a distinctive lock screen – ever-changing and totally unique – just like the owner.

Users agree: in testing, they found it distinctive and it drew their attention in a retail environment in consumer research carried out by Canonical.

NATURAL NAVIGATION AND EDGE MAGIC

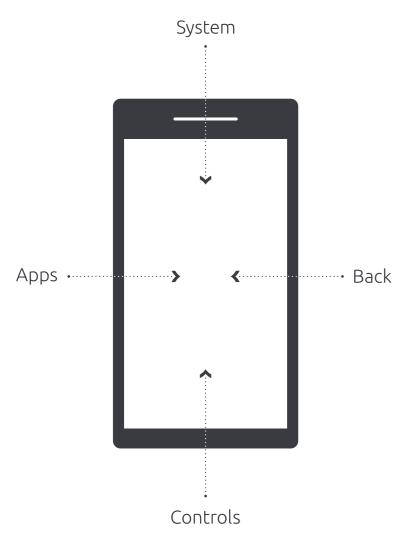
Most people use a few key applications every day, so the left edge of Ubuntu's screen provides fast access to favourite apps. The apps are always there, ready for access with a simple swipe of the thumb; no hunting through pages of application icons.

The right-hand edge is used to go back to the previous app. That makes it amazingly quick to check something in another app: launch from the left edge then go back with a swipe from the right edge.

The top edge features system status indicators and settings – time, date, volume, network, message notifications, battery. Cleverly, those settings can be accessed directly without leaving the current app – so you can quickly change a setting, or check a message, then go straight back to your app.

The bottom edge reveals controls for the current app when they're needed, leaving more of the screen for the app's content when they're not. From any scope, the bottom edge reveals all scopes on your phone for a quick overview and fast access.

This imaginative use of the screen edges enables Ubuntu users to focus on their content, without being distracted by controls and toolbars.





KEY FEATURES

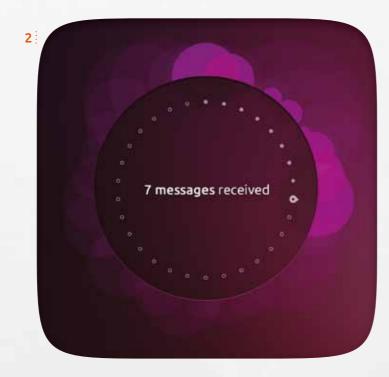






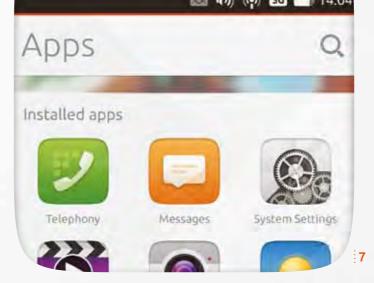
Packed full of innovation, Ubuntu for phones will delight users, from beginners to technology enthusiasts.

- 1: The gallery makes it easier than ever to find, share and edit photos. Users can bring in controls when needed and upload to Ubuntu One or carrier cloud storage making them available on all devices even iOS, Android and Windows.
- 2: A beautifully designed, personalised greeter delights the user at first sight. It represents their social life dynamically, changing shape with increased message, call, social media and application activity.
- Stylish scopes ensure effortless navigation to different types of content without the need for home buttons or hard keys.











- Ubuntu's smart search capability makes finding content a breeze. It looks online as well as on the device, and returns the results to the scope. Looking for a specific track? Ubuntu's music scope searches the phone and online retailers including Amazon.
- Indicators are cleverly controlled with a swipe down from the top of the screen, and then by gliding through the settings. Switch between wi-fi and cellular, check notifications, battery lifetime, verify date and time, or navigate a host of other settings instantly.
- Contextual controls are revealed by swiping up from the bottom. They don't take up screen space, leaving it free for content when you don't need them.
- Switching between apps has never been easier. A full left to right swipe reveals the app scope showing all open apps, while a swipe from the right moves instantly to the last app used.
- A swipe from the left invokes the launcher with your most important applications. Web apps and native apps sit side by side as equal citizens.
- Quick to learn, natural swiping gestures from all four edges make it easy to access content on apps, and on home, music and video scopes. The days of icon grids are over.
- The head up display (HUD) finds the right commands to modify content, such as image manipulation, movie editing, document management you name it, the HUD can find it, all it needs is your command.

The HUD brings all the rich capabilities of PC applications to the phone, part of our vision for complete convergence in personal computing.





SCOPES - DISCOVER MORE

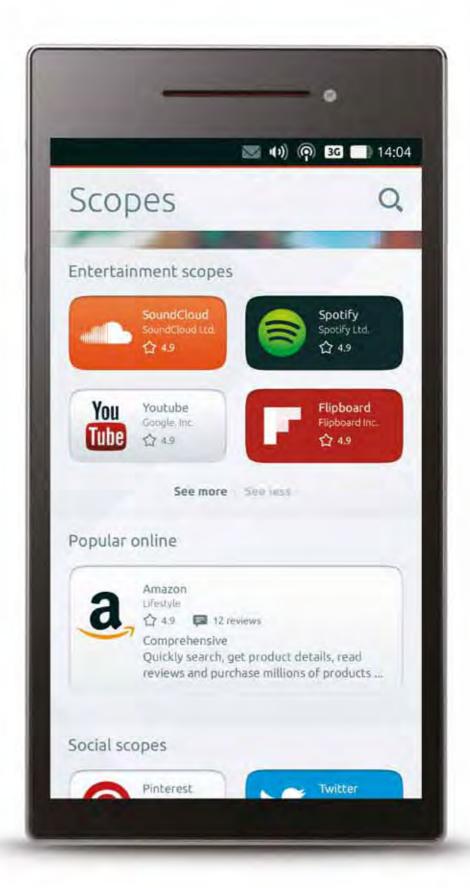
Scopes surface content the way users think about it. They enable any kind of content to be instantly available on the home screen. Content items are presented beautifully, and are easy to browse with a thumb swipe.

The music scope, app, video and other themed scopes are just a sideways swipe on the home screen, which presents the most used apps and welcomes the user after the greeter screen.

It's an intelligent, visually arresting and easy-to-use content discovery tool at the centre of the neat, effortless organisation of Ubuntu on phones.

For Industry, scopes present an opportunity to customise the device and prioritise content in a sensitive way. You control the default scopes on devices you ship – so you can prioritise content that your users will appreciate. Users are free to customise further. New scopes are easy to program, and can be built around seasonal campaigns or sponsorship tie-ins like sports tournaments – with enough real-estate for brand partners.







DIFFERENTIATION WITHOUT FRAGMENTATION

Ubuntu can be easily customised with OEM or carrier-specific branding, content, services and apps without fragmenting the platform. The greeter can be customised and core native, HTML5 or web apps can be pre-installed to appear on the launcher.

Content offerings such as music, sponsored events or apps can be prioritised on the home screen.

Back-end services such as billing can be connected to the Ubuntu front end. So for example, if a user searches the music scope to look for the album 'Revolver' by The Beatles, Ubuntu's smart search capability will surface it in the scope, prioritising the example available in a carrier's store. The user can then choose to buy it from within the scope, with the transaction captured directly by a linked billing service.

Together, these features make Ubuntu a point of differentiation. From its expansive open greeter screen, discoverable content through stunning scopes and interaction through all four edges, the fluid content-centric experience is very different to its rivals.



"...the operating system looks and feels different from Apple's iOS, Android, Microsoft's Windows Phone and even Nokia's recently abandoned MeeGo, which is now being turned into Jolla's Sailfish OS."

The Street

A PROVEN PLATFORM IN THE PC INDUSTRY

Most people know something about Ubuntu – it's the most famous Linux operating system. But many are still surprised at its global footprint, with more than 20 million users and deep engagement with the PC industry.

Ubuntu is being adopted by governments at an accelerating pace – Brazil, China, France, Germany, India, Spain, the UK and the US are all seeing rapid growth as public bodies recognise Ubuntu's security and cost benefits. The UK government rated Ubuntu 12.04 the most secure desktop option for their users, and, the Chinese government selected Ubuntu as the reference architecture for an open, widely-used and standardised Chinese operating system, Ubuntu Kylin.

2500 retail outlets in China and over 300 in India feature Ubuntu PCs. Some 90% of Dell and Lenovo PCs and more than 50% of HP PCs are certified to run it. In fact, nearly 70% of the PCs shipped by the major IT companies are certified to work with Ubuntu.

All of which makes Ubuntu easily the world's third largest desktop OS – and one that's gaining ground on its bigger rivals.

Easy for OEMs

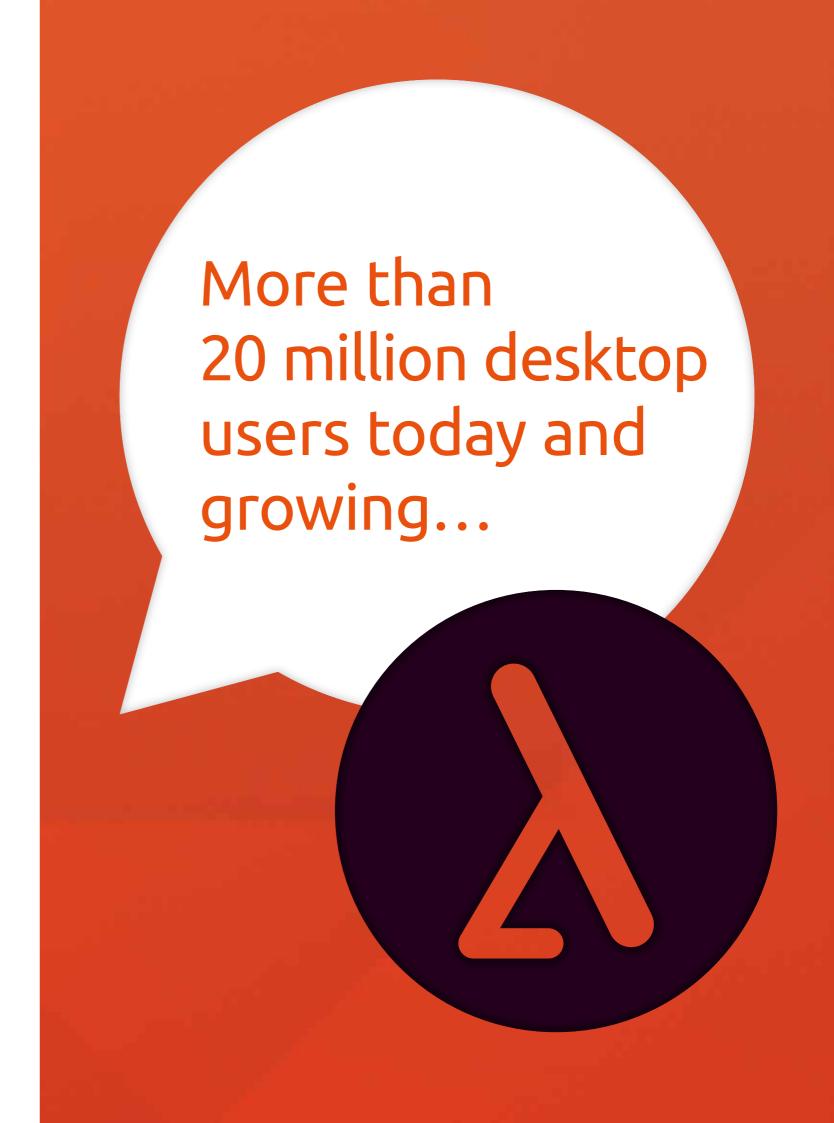
One reason for this success is the Ubuntu hardware enablement program – a capability Canonical is now extending to the mobile world. Canonical has taken steps to ease the adoption of Ubuntu in the phone market. For example, the reuse of Android board support packages (BSPs) means handset makers who currently produce Android phones can easily add Ubuntu to their existing product roadmaps.

"Ubuntu is well established in terms of design excellence, community participation and partner adoption. That ecosystem is a natural fit for mobile devices," explains Mark Shuttleworth, founder of Ubuntu.



"Ubuntu is an open source OS renowned for its customizability and stability. To fulfil the various needs of a diverse market and user base, the strategic alliance with Ubuntu is absolutely a win-win cooperation."

Stanley ChangProduct Director, ASUS



RAPID PATH TO MARKET

Ubuntu helps industry deliver innovation to the market faster, and maintain it with less cost by taking a collaborative path to development with real code visibility.

Canonical maintains a common core of the Ubuntu OS and includes services like master image production, hardware validation, maintenance, and security updates which typically are the responsibility of industry when using Android.

It uses the Linux kernel with Android additions, so Android BSPs are reusable, and as the Ubuntu desktop is mature, stable middleware can be used directly.

Ubuntu code is always open, so it's visible. Carriers and OEMs can contribute generic code to this common core, helping to shape it, whilst artfully keeping more feature specific code private.

Devices, and innovations like NFC and Bluetooth 4.0 LE get to market faster with less cost which in turn enables carriers and OEMs to be more responsive to consumer demand. Maintenance costs are reduced as the updating process can take place through the common image.

Industry Support: THE CARRIER ADVISORY GROUP

The Ubuntu Carrier Advisory Group (CAG) lets mobile operators shape Ubuntu's mobile strategy.

Members have received advance confidential briefings on key elements of Ubuntu for smartphones, such as operator differentiation and device customisation. In return they've provided us with industry insight to ensure that Ubuntu meets their needs.

Chaired independently, CAG is a good example of the openness at the centre of Ubuntu which ensures the ecosystem grows to meet partner and user needs.

CARRIER ADVISORY GROUP































SYSTEM REQUIREMENTS

System requirements for smartphones	Mid-tier smartphone	High-end superphone including desktop
	Content driven, advanced UI, feature rich and affordable	True device convergence, PC on-a-phone with thin-client access to Windows apps
Processor architecture	Quad-core Cortex A7 or equivalent	Quad-core Cortex A15 or Intel Atom
Memory	512MB - 1GB	2GB
Flash storage	8GB eMMC + SD	32GB eMMC + SD
Multi-touch	Yes	Yes
Display	800x400 pixels	720x1280 pixels with MHL/HDMI support
Desktop convergence	No	Yes

REASONS TO CHOOSE UBUNTU

- A stunning interface and deeply designed experience
- Discover content and apps through stunning scopes
- Customisation opportunities for operators and OEMs
- Fast native apps using Qt, OpenGL/GLES, alongside the web and HTML5
- Fast enablement uses standard Android kernel BSPs
- Faster to market with parallel development
- Great performance on mid-level smartphone hardware
- Full desktop on high-end phone hardware amazing convergence
- Established cloud and management services

"When Canonical announced its Linux-based Ubuntu OS would be getting the mobile treatment, it was met with waves of excitement.

Now, after some hands-on time with the open-source OS we can safely say Ubuntu's touch-friendly future looks very bright indeed."

Stuff

