

## FAQ

### What is Canonical announcing today?

Canonical announced a distinctive smartphone interface for its popular operating system Ubuntu – making the phone part of a family that already includes the PC and TV. This is the first time that Ubuntu will be available for handset OEMs, mobile operators and silicon vendors.

Ubuntu runs well even on entry level smartphones targeting Q3 2013; it brings a stunning new interface, optimised for web, email, phone, messaging and media consumption. For basic smartphone users, Ubuntu is a cleaner and more beautiful phone that encourages data consumption – web and email, together with media.

At the very high end of the range Ubuntu is unique in offering a complete PC built in: connect the phone to a screen and provide a bluetooth keyboard, and the phone becomes a full PC with local Ubuntu and remote Windows apps, a perfect enterprise thin client and phone in one.

### What is the target market for Ubuntu phones?

Ubuntu works on any device specification, but it meets the demands of two key segments particularly well: those who want a beautiful but easy to use, basic smartphone and those who want enterprise-grade thin client and desktop capability in a secure smartphone that can be managed using enterprise tools.

### What makes Ubuntu a great choice on an entry level phone?

As an entry-level smartphone, Ubuntu offers a stunning experience that is well differentiated from Android, easy to use and uncluttered. On phones with a low bill-of-materials, Ubuntu is sharper, more responsive and easier to use than existing options.

### What makes Ubuntu great on high-end phones?

At the high end of the smartphone market Ubuntu creates an entirely new 'superphone' category: a phone that becomes a full PC when docked with a keyboard and monitor. Ubuntu is a popular desktop in security-conscious enterprises and government deployments.

It includes thin client software that enables Windows apps to be delivered, securely, from the cloud or the enterprise data centre.

That full desktop is included in every high-end Ubuntu phone, and the phone can be managed just like an Ubuntu desktop or server, using standard Ubuntu management tools.

### What makes it so different from anything available on the market today?

Ubuntu feels cleaner and more immersive than existing smartphones. It doesn't need a home button, and the interface for most apps is cleaner and more open, with more room for content. That's because Ubuntu introduces several new ideas to handheld interfaces.

It uses every edge of the phone, giving you fast access to favourite apps, fast switching between apps, immediate access to system settings at any time, and a way to show or hide the buttons that make up an app interface or structure. Keeping those items "off the edge" leaves more room for content and makes the phone feel bigger and more spacious.

For OEMs and operators looking for a competitive alternative to the current duopoly of mobile operating systems, Ubuntu offers:

- An existing developer community and app ecosystem
- Relationships with many OEMs who already ship Ubuntu on the PC
- Patterns of customisation for operator and OEM partners
- Great performance from low to high end hardware.
- Finally, the convergence of desktop, thin client and phone into a high-end handheld device is unique to Ubuntu.

### Which markets will Ubuntu phone OS be available in and when?

We are engaging operators globally – launches will be subject to their timetables. We believe Ubuntu will first launch on smartphones in Western Europe.

**When will it be available to buy?**

We expect Ubuntu the first Ubuntu phones to ship in late 2013.

**How much will it cost?**

We expect it to be priced competitively. Ubuntu is an affordable alternative for our partners and consumers.

**How will Ubuntu phone OS come to market?**

End users will be able to get their hands on Ubuntu powered phones through normal mobile phone retail channels, led by our partners. Developers will also be able to install Ubuntu on a variety of common phone models.

**How can you expect to compete with Android and iOS?**

The mobile market is still nascent, there is ample room for new offerings. Ubuntu is a new alternative for operators and hardware partners. It will be strong in emerging markets where there is demand for attractive, basic smartphones, as well as with the sophisticated enterprise market that provisions thin clients, PCs and phones and would appreciate a unified OS and device strategy.

**How does Ubuntu phone OS differ from the leaders in the market today – iOS, Windows and Android?**

Visually, Ubuntu is very distinctive and elegant. Windows has a flat, over-simplified visual style and iOS has very glossy, skeumorphic, photo-realistic icons. Ubuntu features a sophisticated, neat but natural interface that showcases your content.

While both Ubuntu and Android use the Linux kernel, and so share drivers and low-level services, Ubuntu is a full PC operating system. We are able to offer a more complete platform in part because we enter the market now, when phone CPUs can run a complete desktop environment remarkably well. Android was initially introduced on older CPUs and thus has many limitations compared to the full Ubuntu range of capabilities. Ubuntu apps can use all cores of the CPU and the full native OpenGL and GLES of the GPU. Being an open OS, Ubuntu is more likely to appeal to manufacturers that are already shipping Android phones than Windows.

**How can Ubuntu provide such a good experience on entry level smartphones?**

Ubuntu does not use a Java virtual machine, improving performance for apps that are natively compiled to use the full hardware capabilities. All core apps are native applications, making the basic phone functionality extremely lean and fast.

Ubuntu also supports rich web applications for highly portable application development that targets multiple platforms – iOS, Android, Windows and Ubuntu.

**What are the minimum hardware requirements for Ubuntu on phones?**

Ubuntu will run on low end phones released in 2013. A dual-core Cortex A9 running at 1 Ghz, and 512 MB RAM are the key requirements.

**How will you attract mobile developers to Ubuntu?**

There is already a thriving developer ecosystem around Ubuntu, the worlds most popular desktop Linux. In addition, most Android developers use Ubuntu to develop their mobile applications, so there is a large developer base that already have Ubuntu installed.

Ubuntu will include both the Chromium and Firefox browsers, ensuring a first-class and competitive web browser experience as well as first class web and HTML5 applications. So developers aiming for cross-platform audiences, using tools such as PhoneGap, will find that Ubuntu is very easy to support in addition to iOS, Windows and Android.

Games developers want full access to the native OpenGL and GLES, together with top class gaming development platforms. Ubuntu provides native access to all GPU functions for first-class gaming performance, and the leading game engines all support Ubuntu as a target environment.

Native app developers will use the SDK for Ubuntu, which makes it very easy to create beautiful apps that perform well on a wide range of hardware and form factors.