

ubuntu[®]



the human touch

The Ubuntu phone and the road to convergence

David Planella @ UbuCon Berlin, Oct 2015

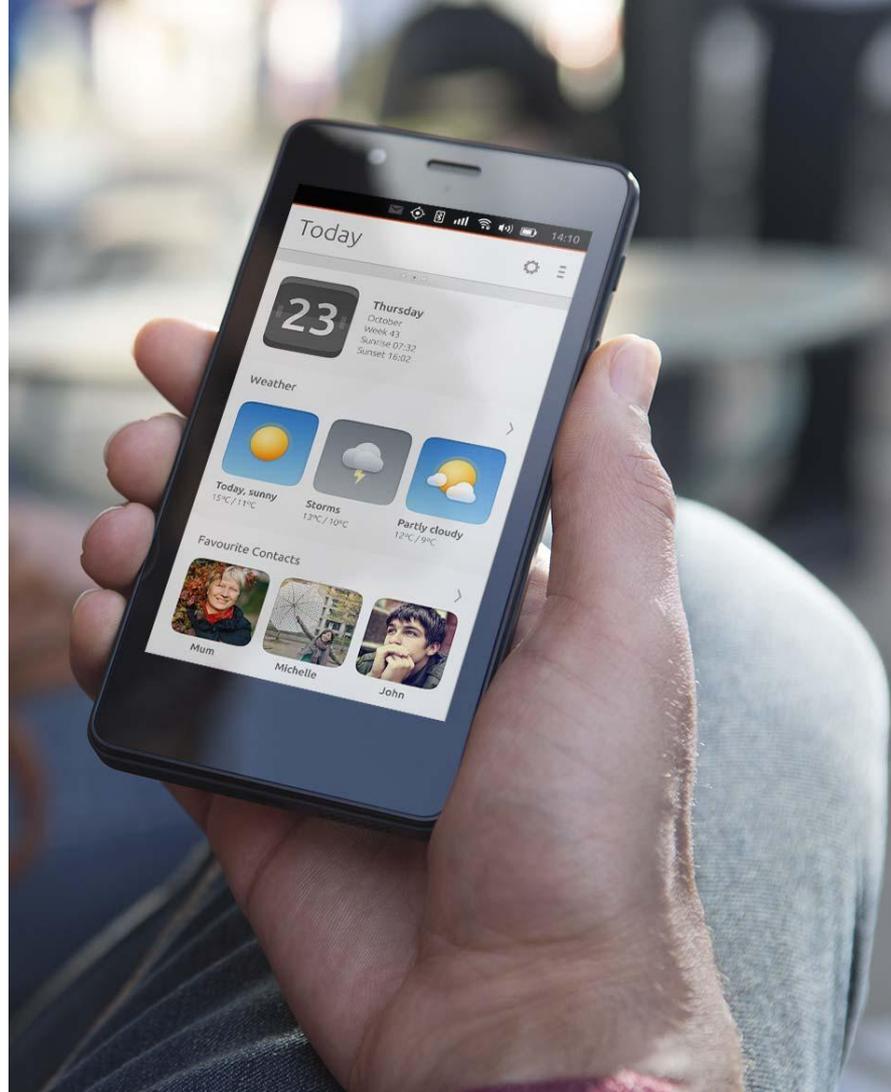
The Ubuntu phone

Taking a bold approach

The premises

Innovating across the board

- A compelling experience for users
- Developer relevancy from day one
- An open source phone
- An ecosystem strategy
- A thriving developer community
- A strategic launch campaign
- A form factor evolution



A compelling proposition



Users

- A beautiful, personal and exciting new way to engage with favourite content and services, without barriers



Carriers and OEMs

- Superior customization opportunities
- Service layer ownership
(user identity, billing, store, content, services)
- Differentiate without platform fragmentation



App developers

- First class citizenship can be achieved with minimal investment
(scopes, HTML5)
- Rich native experience with Qt

Launch strategy

BQ and Meizu are the first two manufacturers to bring Ubuntu devices to market.

Phase 1 - Ubuntu enthusiasts

- Building product awareness: targeting existing user bases of Ubuntu and BQ via online campaign

Phase 2 - Innovators and early adopters

- Meizu devices launch in Europe, followed by China

Phase 3 - General consumers

- Physical retail launch

Launch strategy spotlight: Insiders

The Ubuntu phone insiders

- A diverse group of 30 individuals who get early access to devices and information
 - Ubuntu advocates and developers
 - Bloggers
 - Journalists
 - Youtubers
- Promote the Ubuntu phone and support launch campaigns on social media and at conferences
- Provide early feedback, reviews and advice



BQ Aquaris E4.5 Ubuntu Edition



bq

Screen

4.5"qHD (960x540)

Camera

5MP Fixed Focus+8MP

Autofocus

Dual Flash

SIM

Dual micro SIM

Battery

2150mAh

Connectivity

GSM/GPRS/EDGE/WCDMA
/HSPA+

CPU

Quad A7/1.3GHz

RAM

1GB

Sensors

Gyroscope, Proximity,
Light

BQ Aquaris E5 HD Ubuntu Edition

Screen

5" HD (720x1280)

Camera

13MP Fixed Focus+8MP

Autofocus

Dual Flash

SIM

Dual micro SIM

Battery

2500mAh

Connectivity

GSM/GPRS/EDGE/WCDMA
/HSPA+

CPU

Quad A7/1.3GHz

RAM

1GB

Sensors

Gyroscope, Proximity,
Light



bq

Meizu MX4 Ubuntu Edition



MEIZU

Screen

5.1" 1800 × 1080 resolution

Camera

Front and rear cameras 1080p capable

SIM

Micro sim

Battery

2320mAh

CPU

Quad A15 + Quad A7 (1.7 GHz)

RAM

2GB

Connectivity

GSM/GPRS/EDGE/WCDMA /HSPA+

Sensors

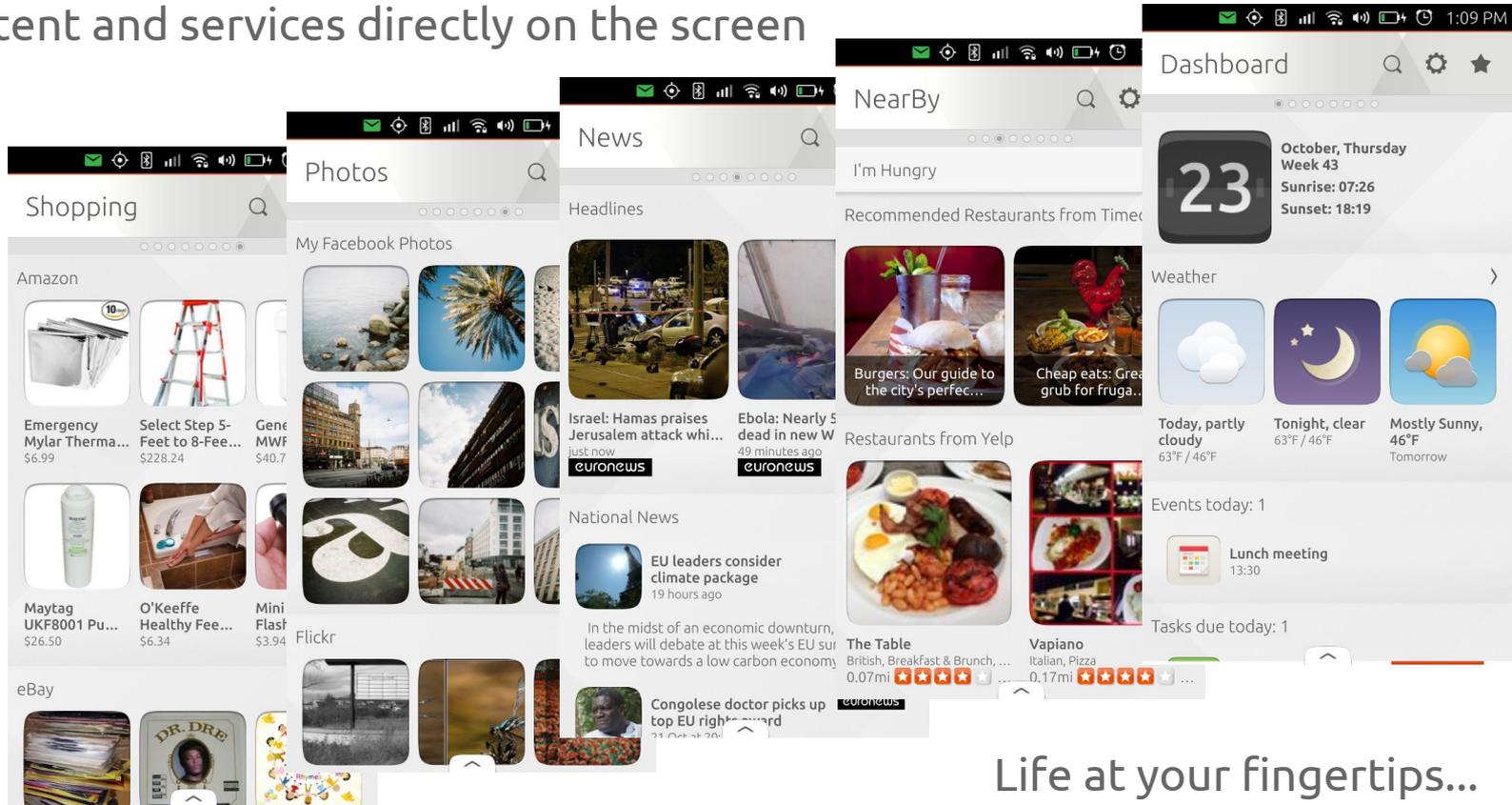
Touch sensor, ambient light sensor, IR proximity sensor, accelerometer, electronic compass, gyroscope

The scopes proposition

Not your typical app grid replica

A new UI paradigm

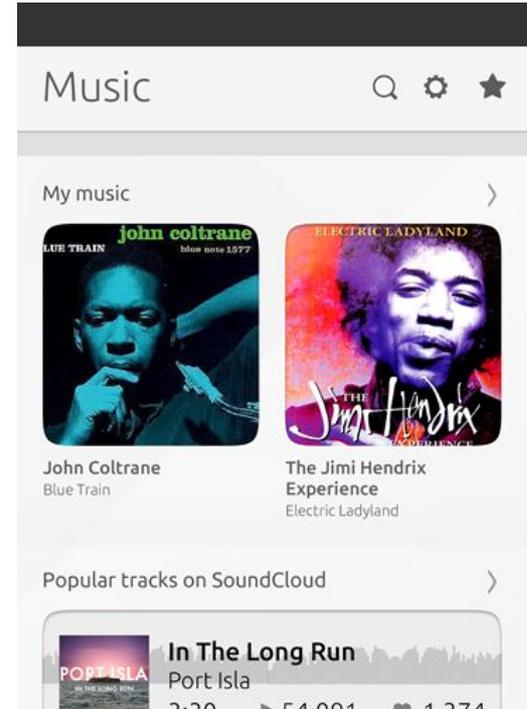
Content and services directly on the screen



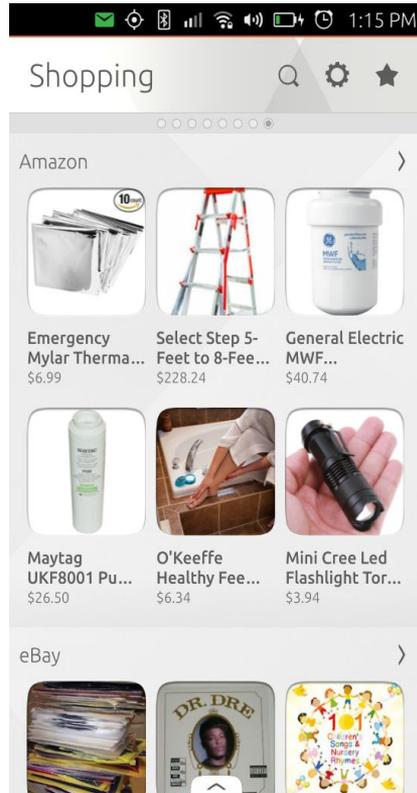
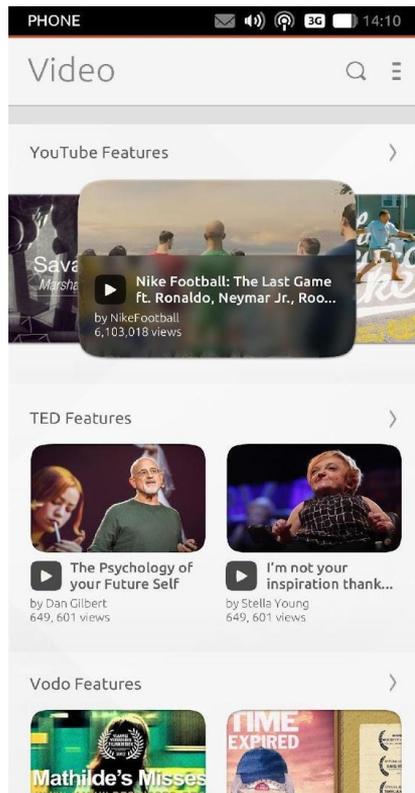
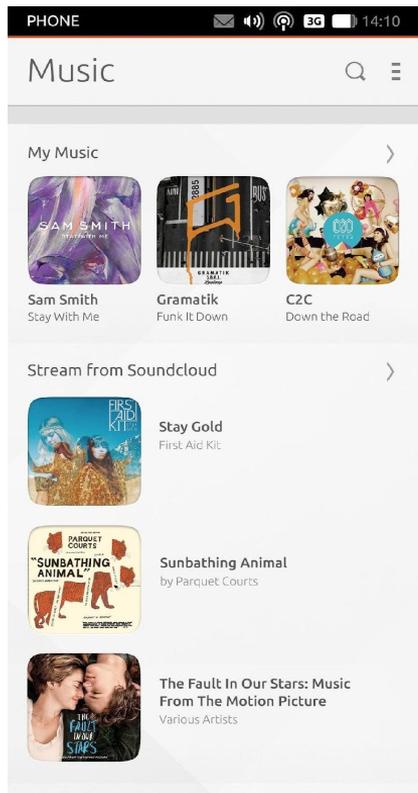
Life at your fingertips...

Shifting away from the apps grid

- The user experience for smartphones has revolved around apps and the app icon grid since the very first iPhone
- Key Mobile Digital Life services on other platforms are delivered via apps - the experience is fragmented
- Core services on existing platforms are controlled by the platform owner - Google, Apple, Microsoft. Developers, OEMs and Operators are confined to a secondary role



Aggregation scopes



Tag your scopes

Be part of the default experience by adding keywords to your scope

Branded scopes

The screenshot shows the SoundCloud mobile app interface. At the top, there is a status bar with various icons and the time 1:09 PM. Below that is an orange header with the SoundCloud logo and navigation icons. The main content area is titled "Popular Music" and features a "Stream" section with two music tracks. The first track is "Sleigh Bells 'That Did It' Feat. Tink" by Red Bull Sound Select, with a duration of 2:41, 35,483 plays, and 601 likes. The second track is "Kakapo Live Red Bull Sound Select Palmerston North" by Red Bull Sound Select, with a duration of 5:45, 1,827 plays, and 69 likes. A "See all" button is located below the tracks.

1:09 PM

SOUNDCLLOUD

Popular Music

Stream

Sleigh Bells "That Did It" Feat. Tink
Red Bull Sound Select
2:41 35,483 601

Kakapo Live Red Bull Sound Select
Palmerston North
Red Bull Sound Select
5:45 1,827 69

See all

The screenshot shows the YouTube mobile app interface. At the top, there is a status bar with various icons and the time 14:10. Below that is a black header with the YouTube logo and navigation icons. The main content area is titled "YouTube Features" and features a video player showing a scene from a football game. Below the video player is the video title "Nike Football: The Last Game ft. Ronaldo, Neymar Jr., Rooney, Zlatan, Iniesta & more" by NikeFootball, with 6,103,018 views. Below the video player is a section titled "All Things TV & Film (14 Videos)" with two video thumbnails. The first thumbnail is for "PSY Hangover feat. Snoop Dogg" by officialspy, with 24,933,575 views. The second thumbnail is for "Darcy Oake's Jaw Dropping Perfor..." by Britain's Got Tal..., with 1,331,145 views.

PHONE

14:10

YouTube

YouTube Features

Nike Football: The Last Game ft. Ronaldo, Neymar Jr., Rooney, Zlatan, Iniesta & more
by NikeFootball
6,103,018 views

All Things TV & Film (14 Videos)

PSY Hangover feat. Snoop Dogg
by officialspy
24,933,575 views

Darcy Oake's Jaw Dropping Perfor...
by Britain's Got Tal...
1,331,145 views

The screenshot shows the Amazon.co.uk mobile app interface. At the top, there is a status bar with various icons and the time 14:04. Below that is a black header with the Amazon.co.uk logo and a search bar. The main content area features a "Shop by department" button. Below that is a promotional banner for "Introducing AutoRip" with a green arrow icon. The banner text says "Buy an AutoRip CD, get the MP3 version for free." and includes a "Learn more" link. Below the banner is a section titled "Recommended for you" with two product recommendations. The first recommendation is "The Perks of Being a Wallflower" by Starring Logan Lerman, Emma..., priced at £9.99 (reduced from £19.99). The second recommendation is "Andrew James 1250 Watt Professional" priced at £79.95 (reduced from £29.95). Below the second recommendation is a section titled "JOHN RUTTER DISTANT LAND".

SEARCH

14:04

amazon.co.uk

Shop by department

Introducing AutoRip
Buy an AutoRip CD, get the MP3 version for free.
Learn more

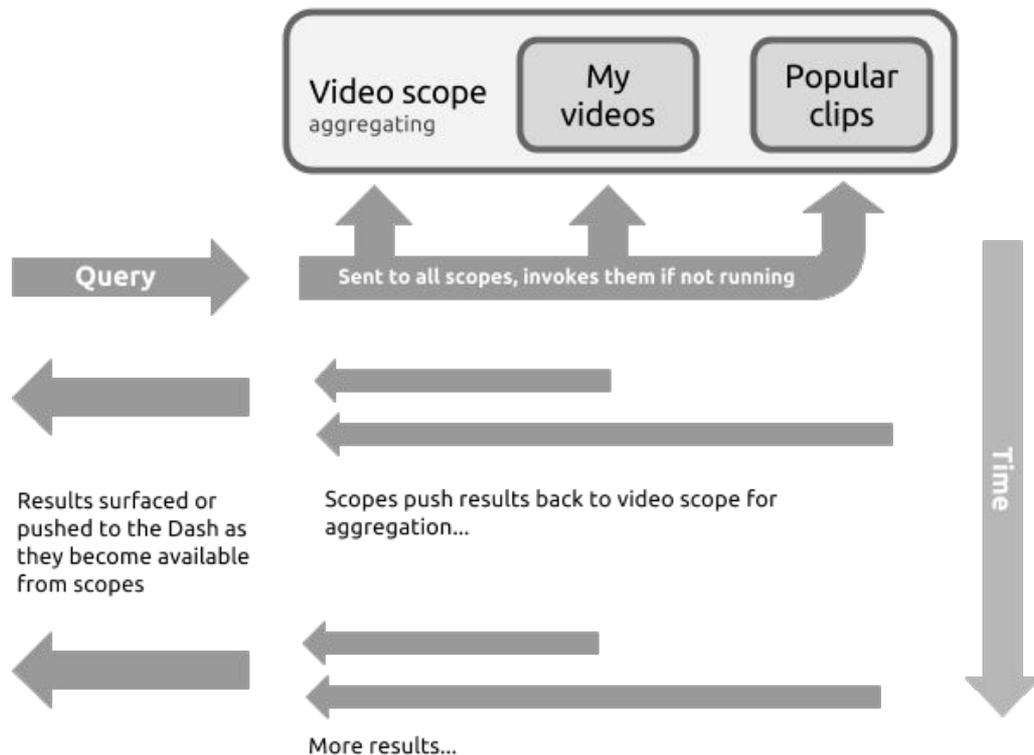
Recommended for you

The Perks of Being a Wallflower
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Andrew James 1250 Watt Professional
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JOHN RUTTER
DISTANT LAND

Behind the scenes: search and aggregation



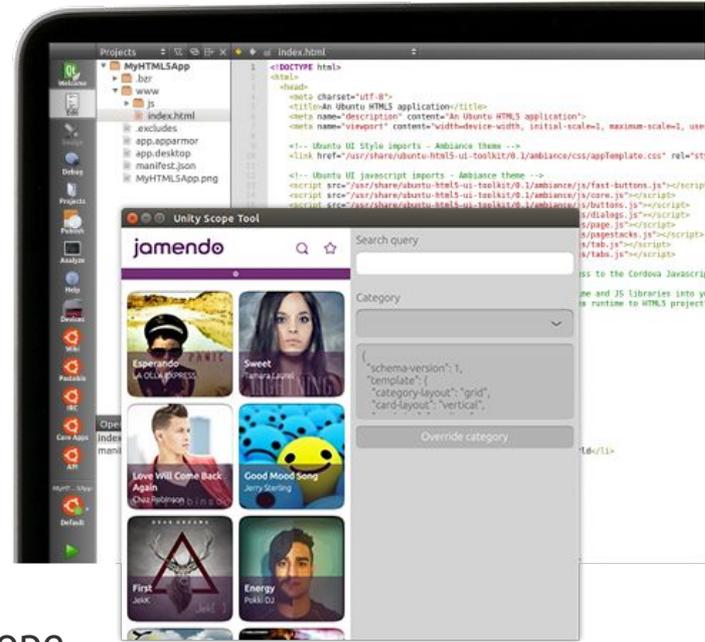
A phone for developers

They need love too <3

Developers are key

An end-to-end developer story

- Full Ubuntu SDK
- Native and web apps are first-class citizens
- Comprehensive documentation on developer.ubuntu.com
- Detailed online app design guides to make your apps Ubuntu
- Easy and secure app upload process to the Software Store
- Seamless app distribution and installation via Apps scope
- A vibrant and enthusiastic community of developers



Multiple entry points for developers

1

Scopes

- C++, JavaScript or Go backend code
- Lowest effort (no UI)
- Greatest visibility

3

Webapps

- Super simple and easy to create and publish
- Found as an app, launched as an app, displayed as app

2

HTML5

- Embracing web technologies
- Blink rendering engine
- Phonegap/Cordova API access

4

Qt/QML

- Declarative Language (C++ optional)
- Great developer support/documentation
- High developer productivity

The Ubuntu HTML5 story

- **A web container, not a traditional browser**
the HTML5 code runs isolated in its own container
- **Container provides run-time access to APIs**
built to expose a rich set of platform access services
- **With the Ubuntu HTML5 UI**
a set of layout and widgets for the Ubuntu look and feel
- **Not limited to Ubuntu HTML5**
it's all standard tech, custom app markup also works
- **Not just a web page: true Ubuntu apps**
web-based and QML apps share the same app model



HTML



HTML5 platform access

Web technologies at the core



- Use the languages of the web: HTML5, JavaScript, CSS3 and W3C APIs are fully supported
- Build convergent, responsive apps that will run across form factors and devices

Powered by the Apache Cordova runtime



- Supercharge your HTML5 apps with native device access
- Ubuntu is an official Apache Cordova platform
- Familiar toolset for existing Phonegap/Cordova devs

Qt/QML

Going native

- Full native OpenGL
- System and service APIs for accessing hardware sensors and alarms
- The freedom to combine QML, C or C++ and JavaScript
- The latest Ubuntu designs so you can build your app to fit with the UI



Security at the core

Apps and scopes are isolated

- > All applications are confined using AppArmor to ensure that they are restricted in what they can do in the user's session
- > AppArmor is a kernel security module that enables mandatory access-control (MAC)
- > Each application provides an AppArmor profile generated based on values in its manifest
- > Apps can only write to their own directory
- > Content sharing between apps is mediated via the Content Service



Community

The stuff we're made of

Community at the core

- Ubuntu is more than an operating system
- It's a massively collaborative project
- Volunteers contribute locally with people from their city or town, or online across country and timezone boundaries
- A worldwide network of local community (LoCo) teams is the backbone of the wider Ubuntu community
- Passion to be part in bringing technological freedom worldwide unites individuals who contribute to Ubuntu
- Diverse opportunities make participation more interesting: advocacy, translation, documentation, development and in general improving and promoting Ubuntu



Community stories

Ubuntu would be nothing without its community of volunteers. Some examples:

- Adnane Belmadiaf (Morocco) implemented key parts of our HTML5 App Store, worked on numerous Ubuntu Community websites and more.
- Nekhelesh Ramanathan (Netherlands) wrote the Clock app for the Ubuntu phone and fixes bugs in the app platform.

Why is this possible?

- Open planning/discussion
- Distributed environment
- Public resources
- Invitations to events
- Accessible engineers
- Friendly atmosphere



Spotlight: the core apps project

A new community of core devs

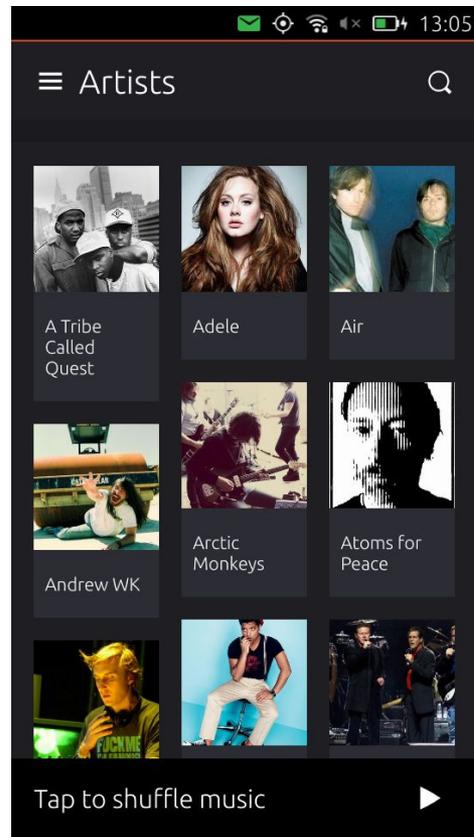
- 150+ individual contributors, out of which 15 regular, self-motivated core developers
- 12 core apps
 - Dekko (Mail), Notes (Evernote), Weather, File Manager, Doc viewer, Calculator, Music, Calendar, Terminal (yes :), Clock, Sudoku, Shorts
- Focus on Quality: test suite with 200+ functional and 80+ unit tests, pioneered on the usage and improvement of automated testing
- Also pioneering on the adoption of new platform technologies, often being the drivers for their implementation, and contributing to it



Spotlight: the core apps project

A new community of core devs (cont.)

- Design driven: excellent example of collaboration between the Design team and community developers
- Music and E-Mail (Dekko) are the flagship apps for convergent design
- Core apps developers also contribute to non-core apps and the SDK



The road to convergence

Where it starts getting exciting

The convergence proposition

The starting point for real smartphone convergence is delivering an Ubuntu personal computing experience

- Effortless multitasking and window management
- Desktop applications and thin client support for mobility and productivity
- Responsive, adaptive applications developed for both touch and point/click input
- Single application store with a range of compatible 3rd party services
- Communication from the desktop interface using the phone's telephony and messaging applications



Doing convergence right



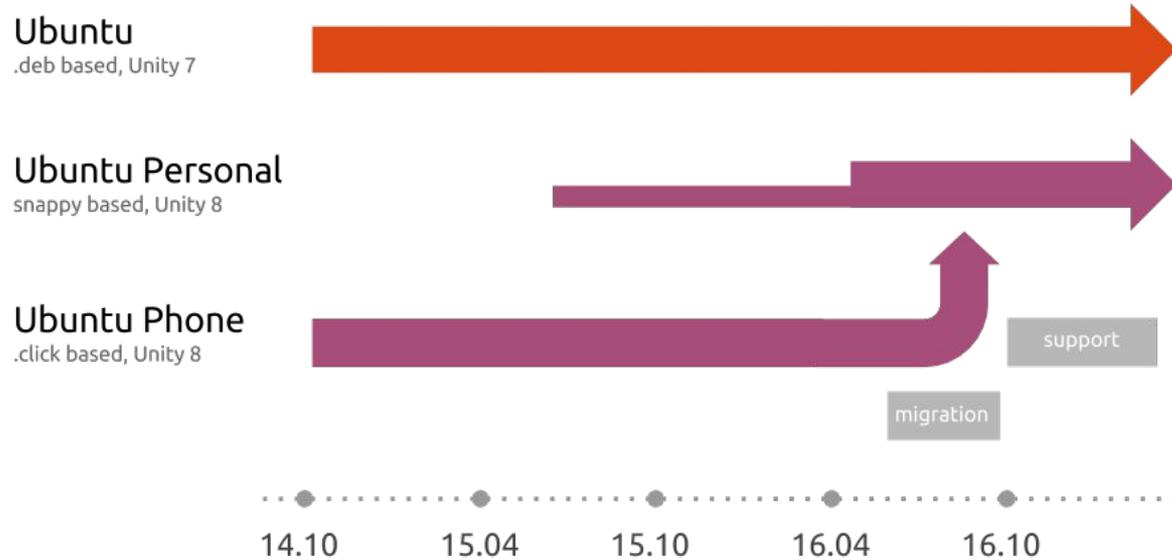
“A truly converged device that combines mobility and desktop productivity can only be done with an OS built on a single codebase”

Converged codebase for developers

- The journey towards OS convergence begins with Unity 8
- Unique proposition: a single, visual framework and toolset for applications to run on any Ubuntu smart device
- Desktop application developers can use the SDK to extend their apps for mobile
- Third party developers can easily create new Ubuntu apps which only need to be developed once and run everywhere

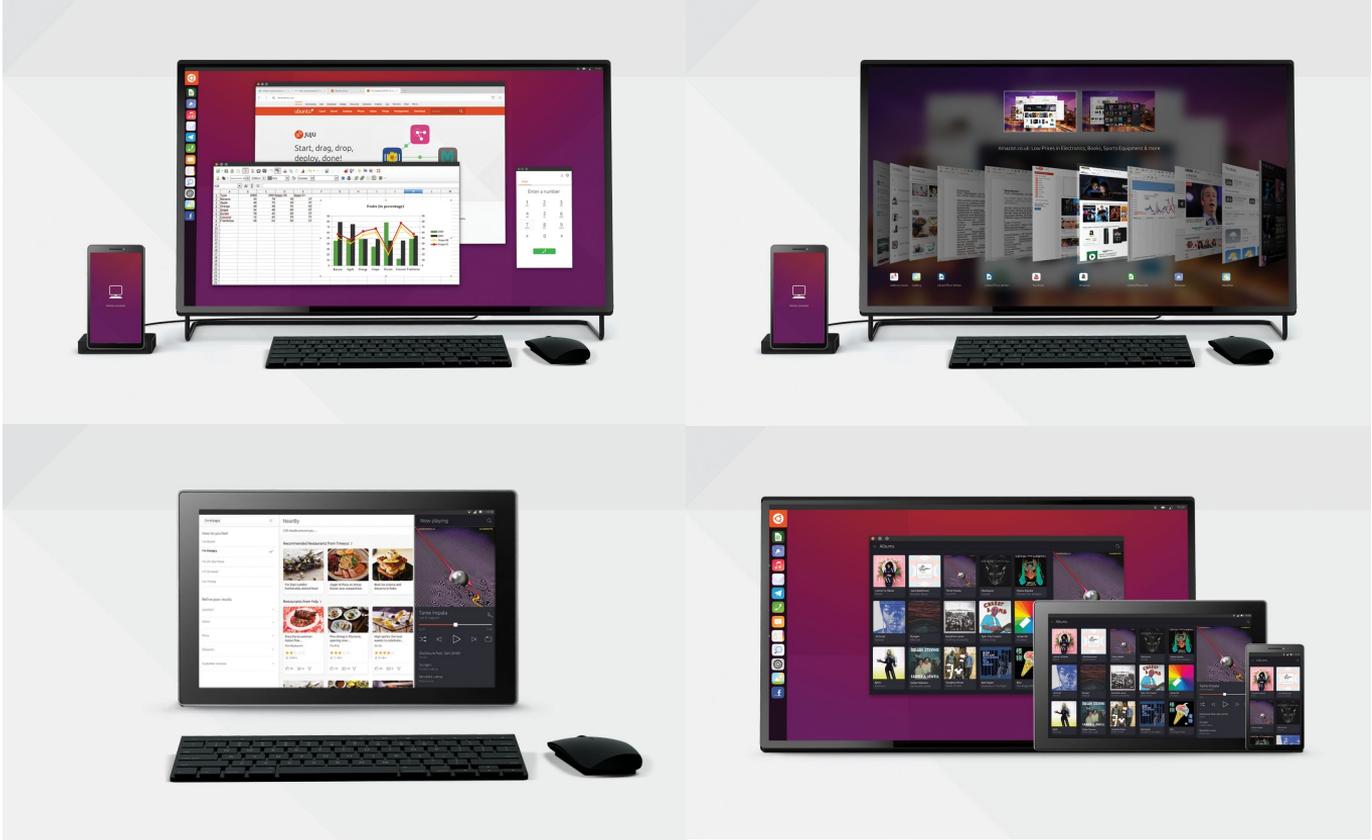


Ubuntu Personal: a converged codebase



- Ubuntu remains Ubuntu
- Ubuntu Personal: phone codebase evolution, combined with snappy
- The Ubuntu Phone codebase will ultimately converge with Personal

One system, one experience, multiple form factors





Thank you and stay in touch!

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