



CANONICAL

Ubuntu Touch Internals

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Big Android BBQ – October 2013





- Based on Ubuntu Core
- Provides an interface and design for phone/tablet
- Builds out of same repositories
- Provides a development area for new technologies and ideas
- Similar to Ubuntu Netbook Edition (UNE)



Where are we now?



The world's third most popular operating system



20,000,000 users and counting



35,000 Windows users download Ubuntu every day

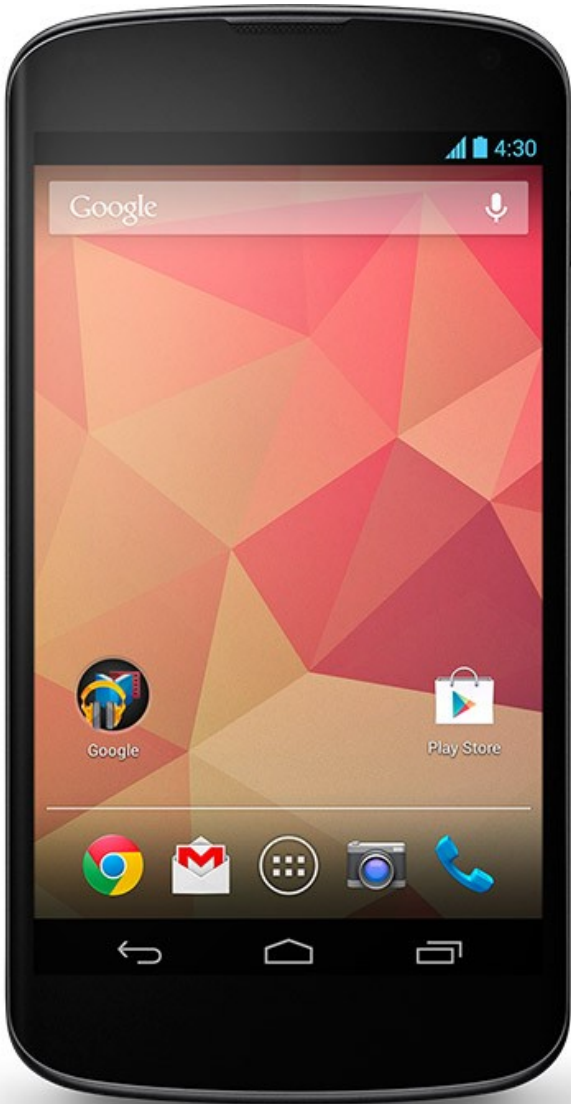


Users in 240 countries, localised in over 80 languages





- Content focus
- Edge swipe driven
- Built for multitasking
- Same design elements as Unity on the Desktop

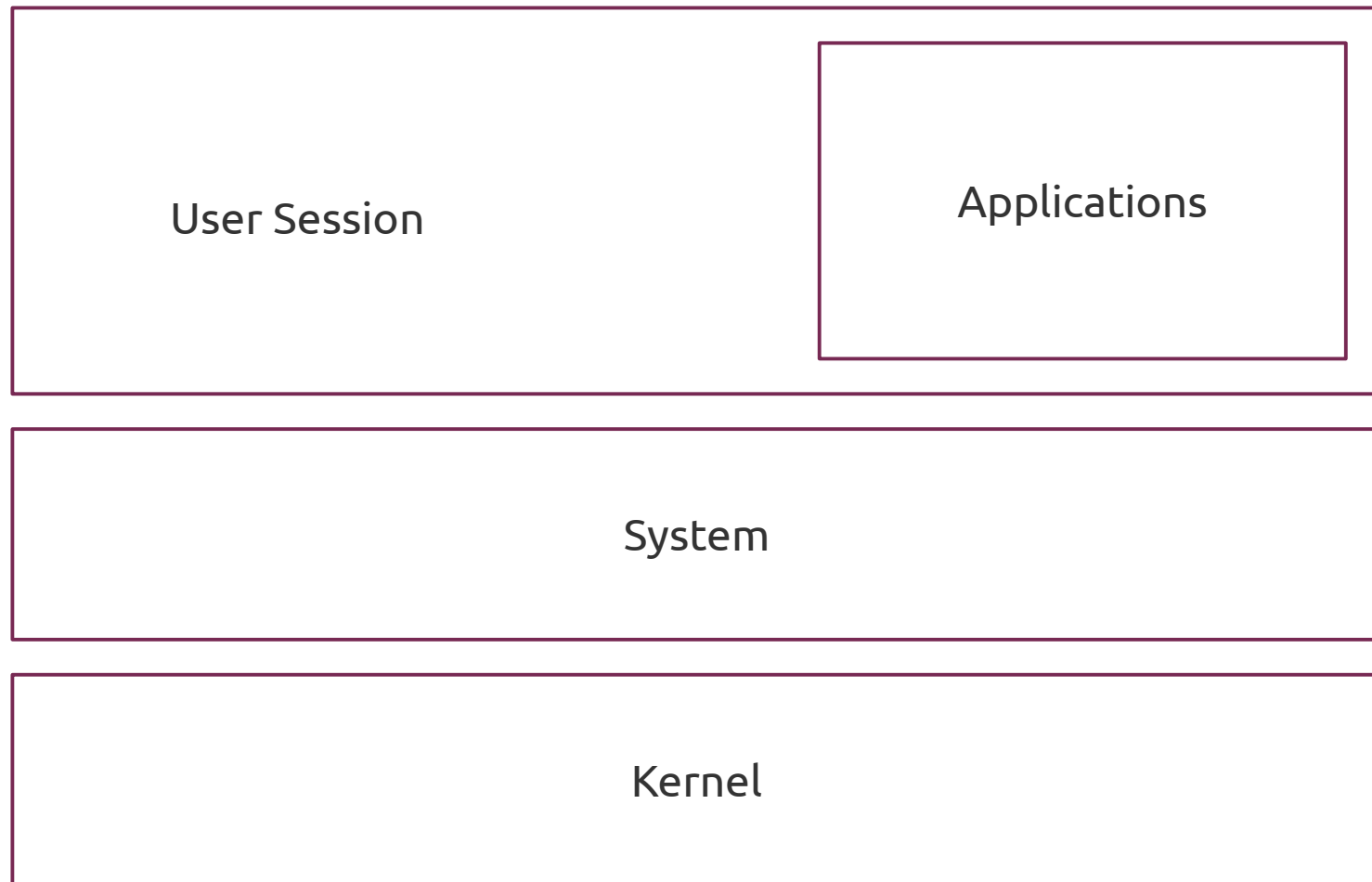


Google Nexus Devices Nexus 4, 7 and 10



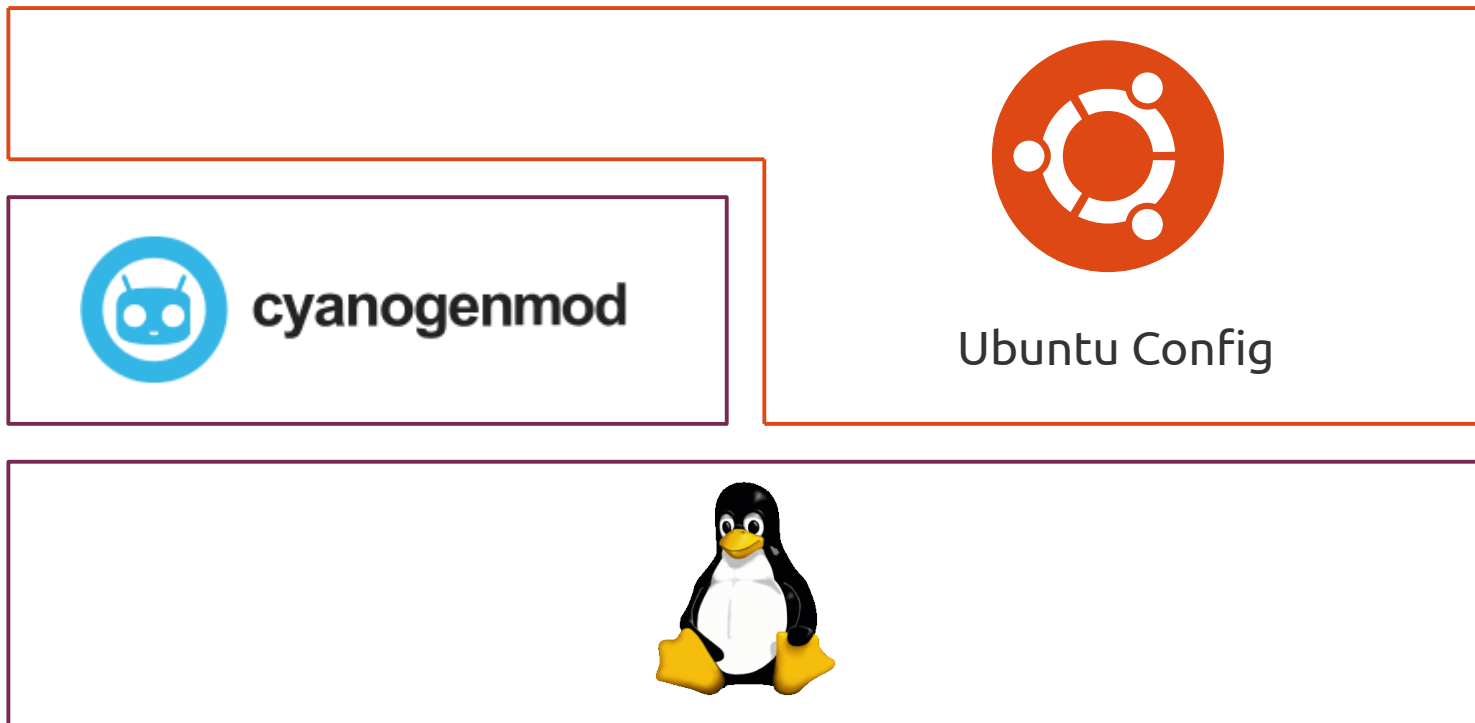


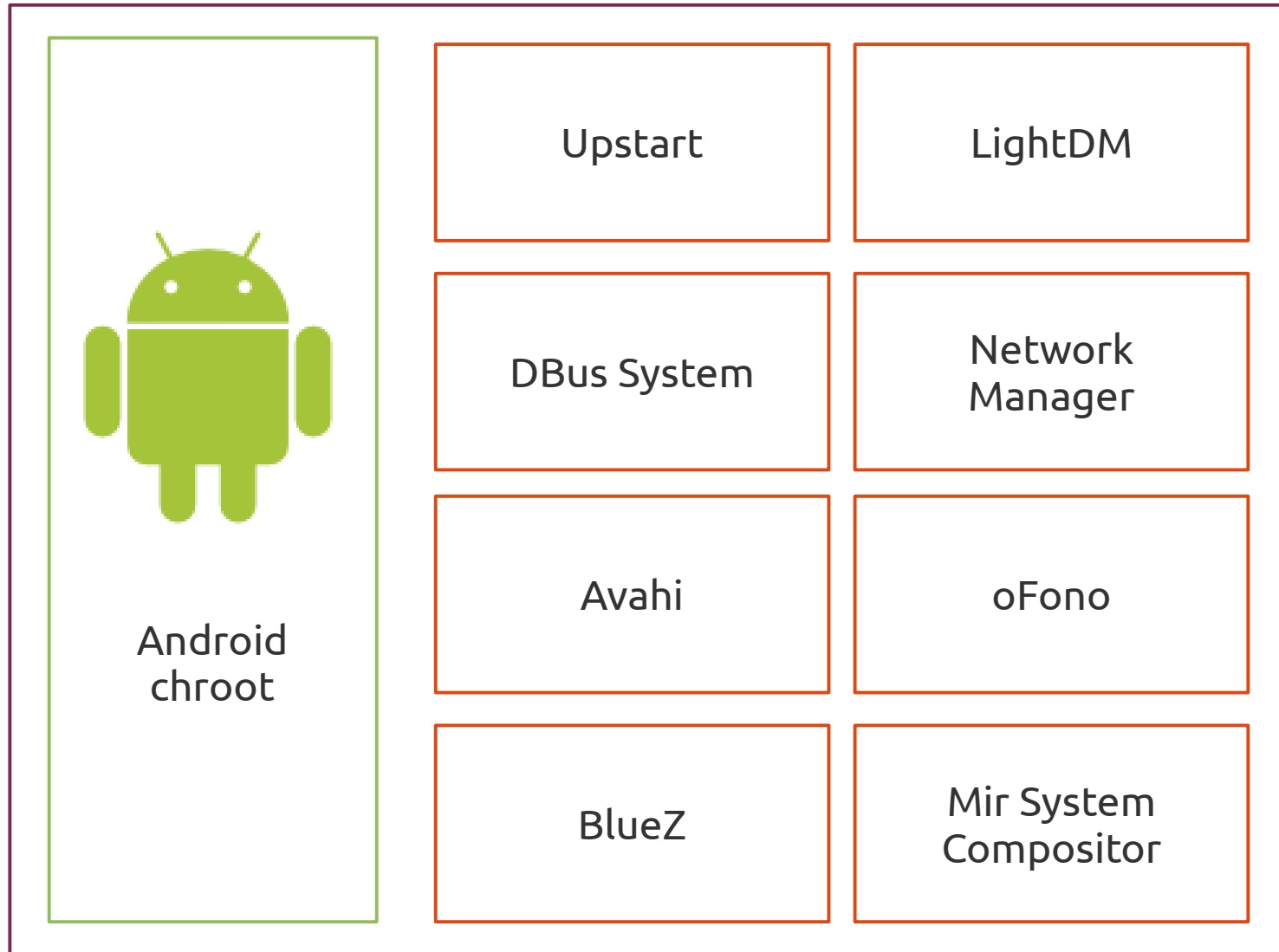
Architecture Overview



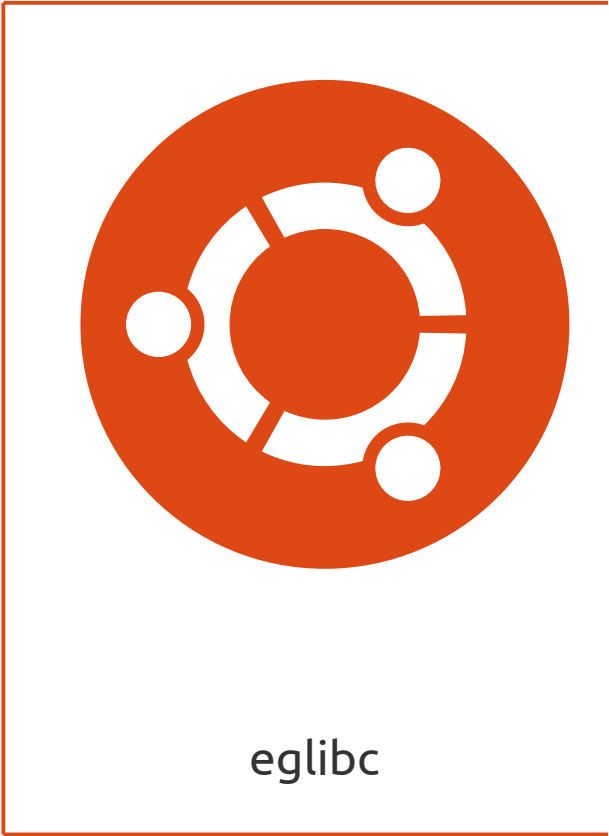
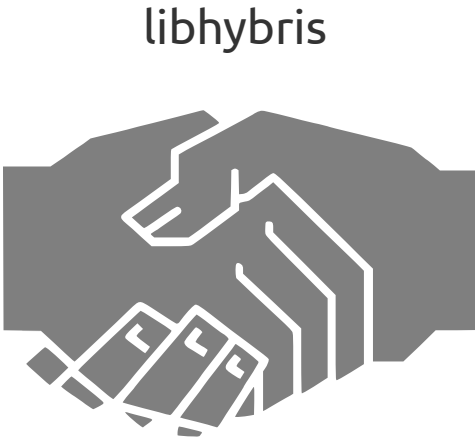
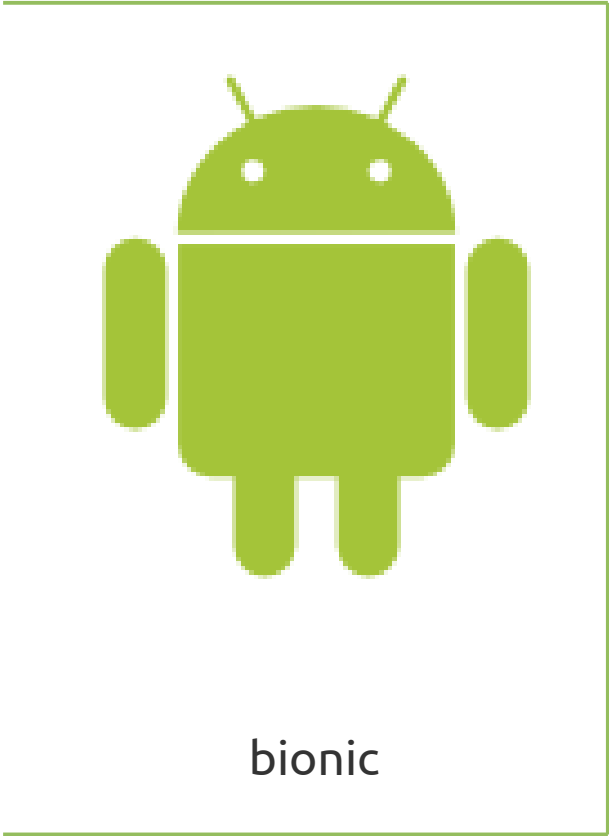


Ubuntu Touch vs. Ubuntu



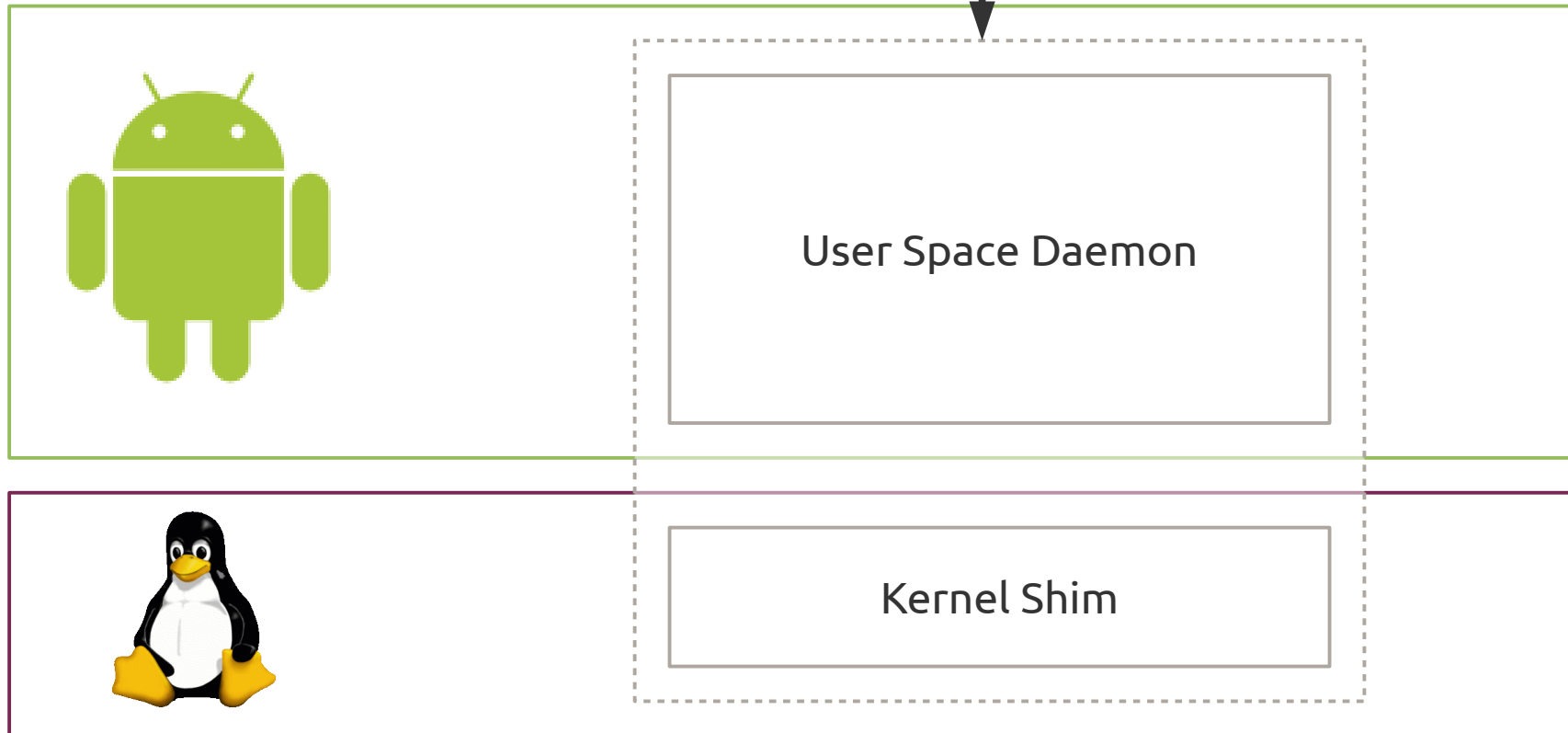


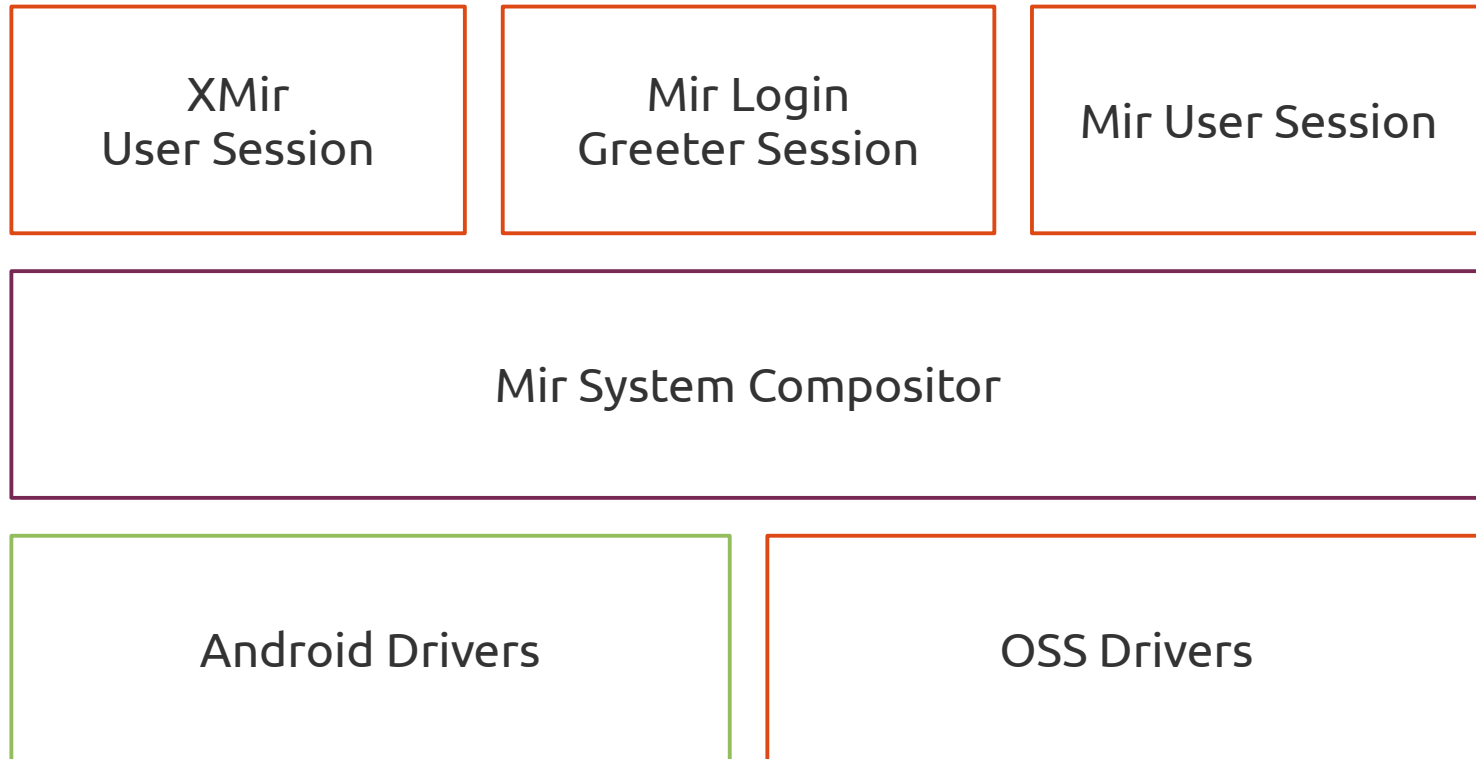
Hybris to bridge libc's

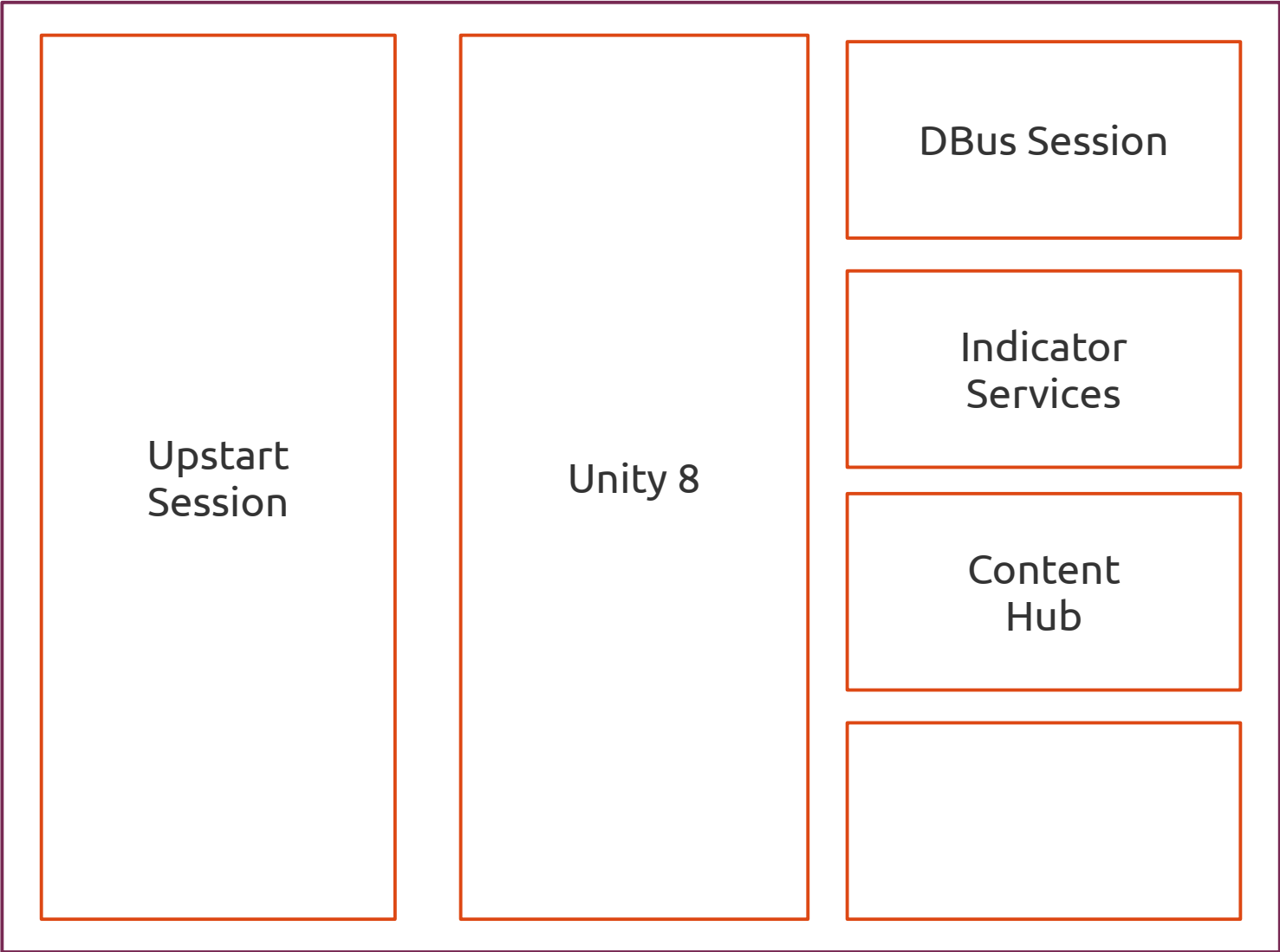




Need both
to complete driver









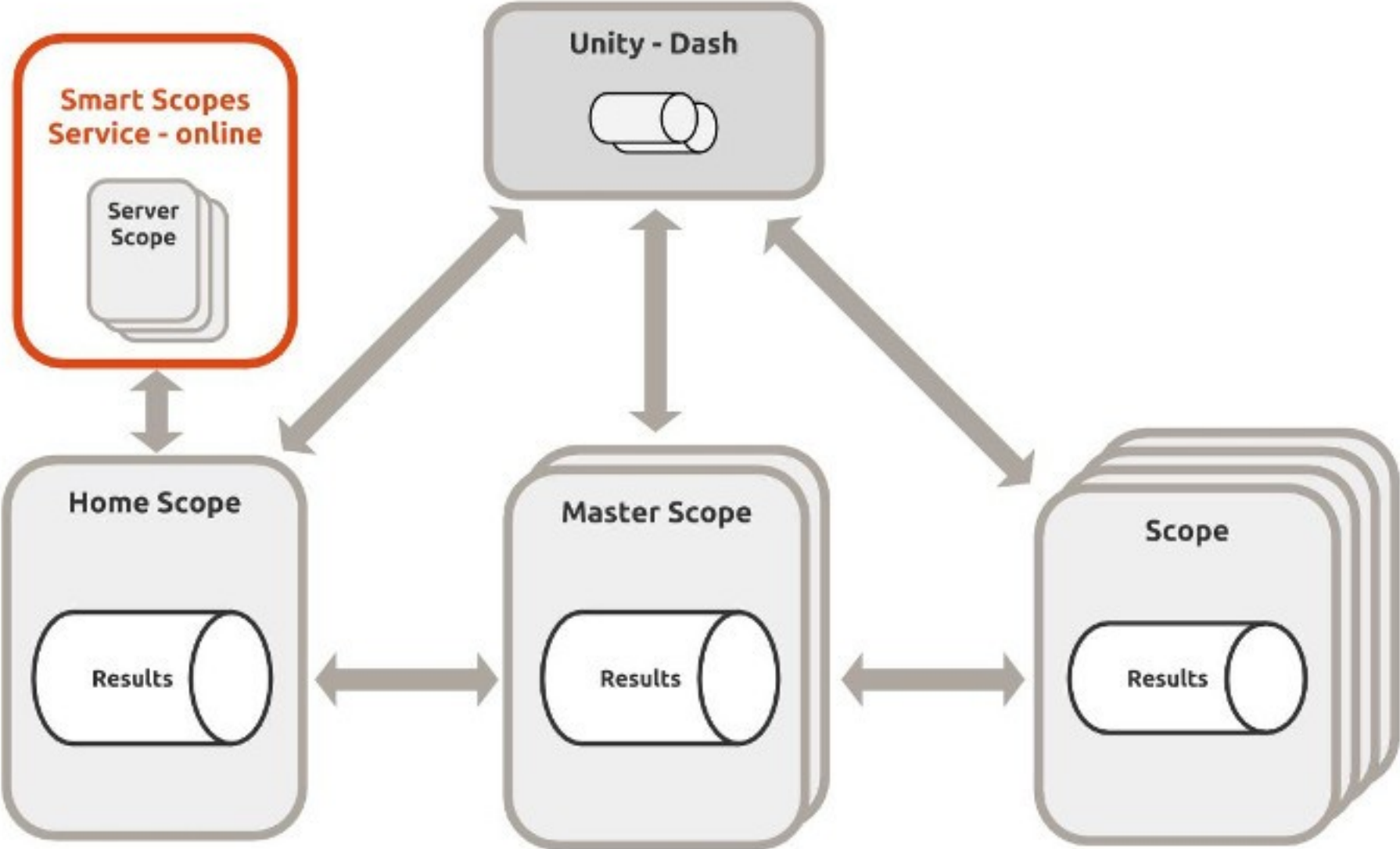
Unity Shell

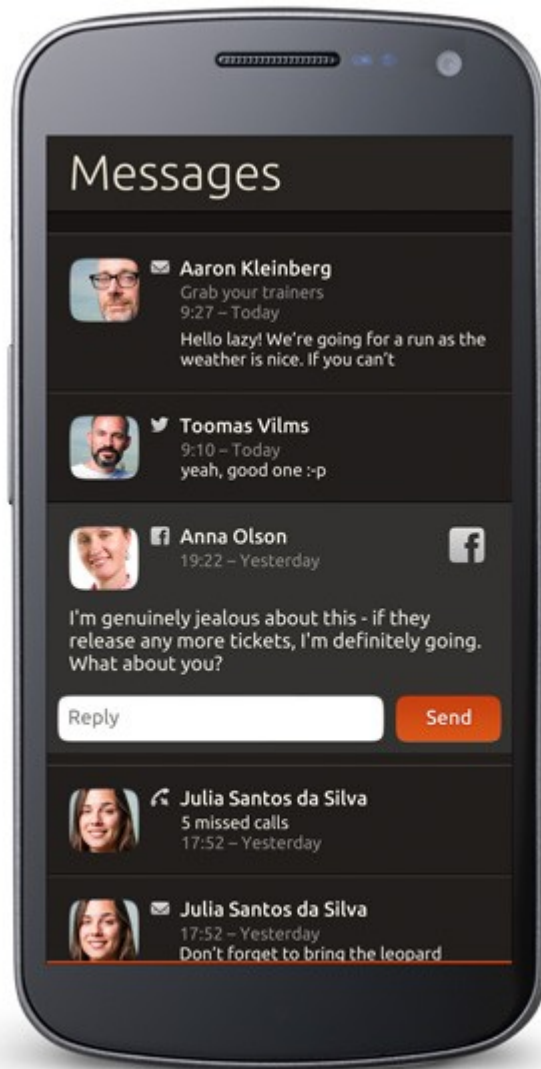
Unity Application Management

Mir Display Server

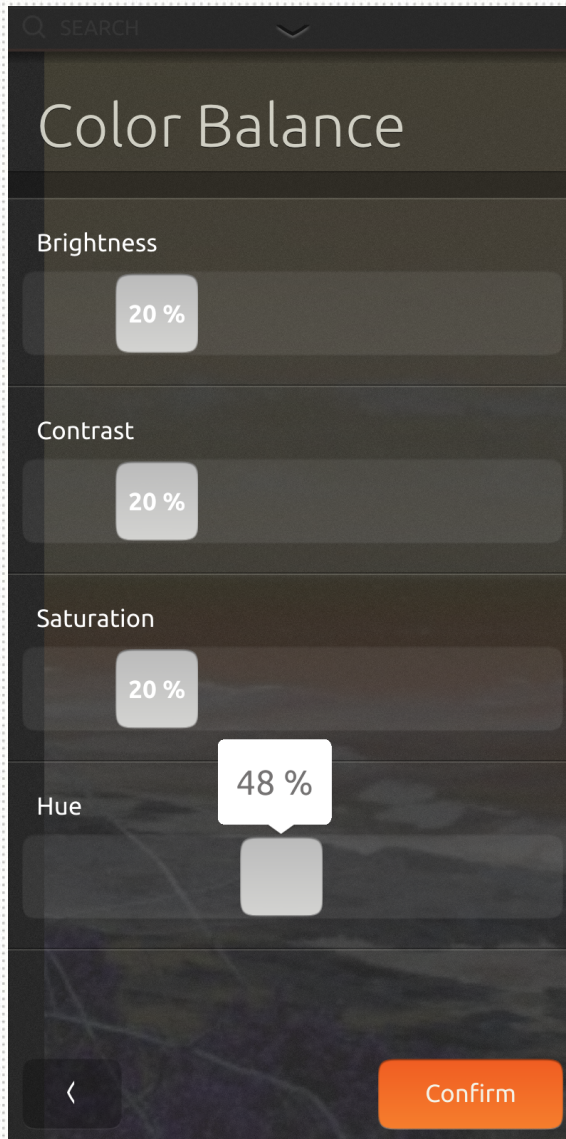
- Shell is QML/Qt for layout
- Application Management layer handles App authorization and management
- Mir display server links in via library

Lens and Scopes

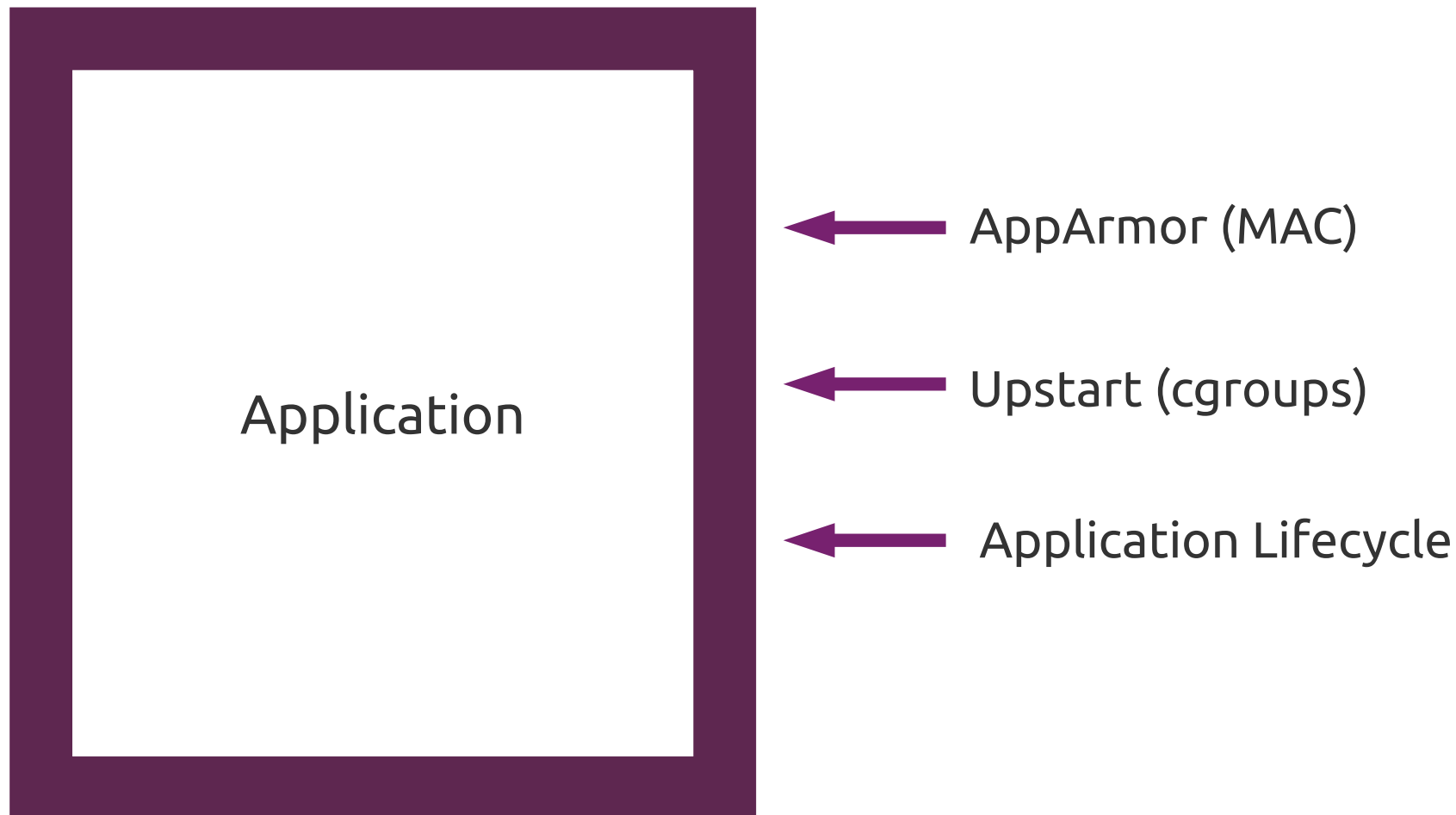


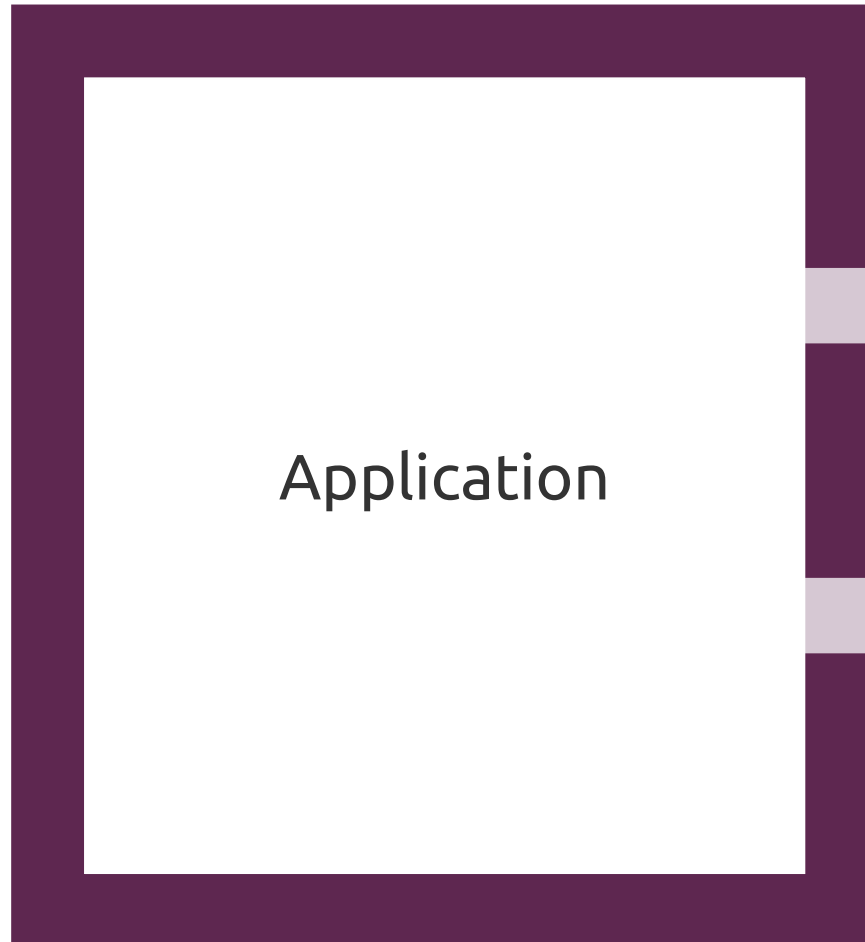


- Provide system functionality
- Descend from top panel
- Category indicators take from applications of similar type (messaging, calendar, sound, etc.)
- Allow for instant reply to messages
- Control of media devices
- Same on desktop/phone/etc.



- Takes Actions from application
- Provides search and enhanced parametrized actions
- Extends feature rich applications to touch environments





DBus
(managed by AppArmor)

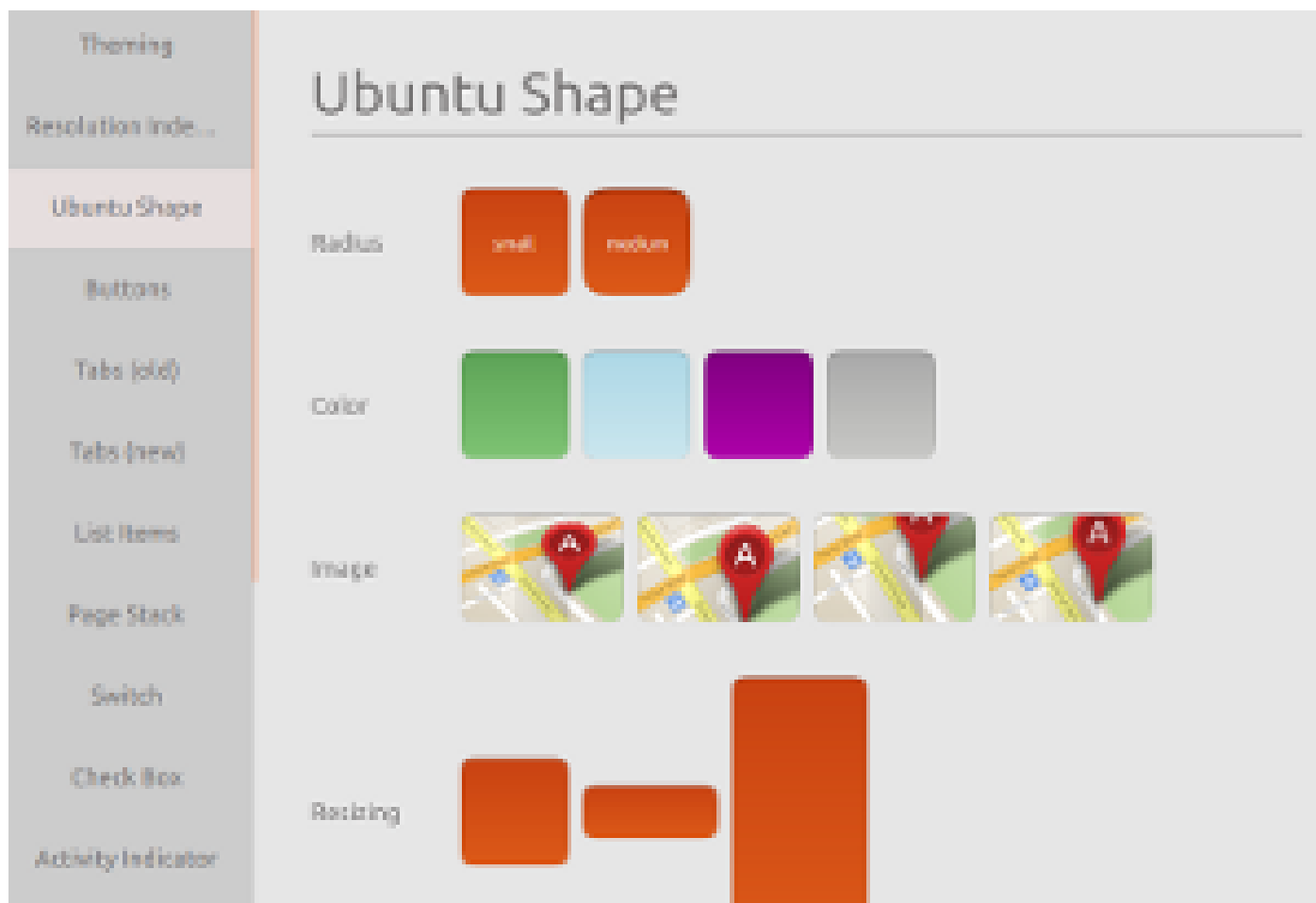
Application Interface
(managed by Mir/Unity)



Application “Root Kit” would like to use your address book to help your friends find out about amazing offers from our Mafia sponsors!

Deny

Allow





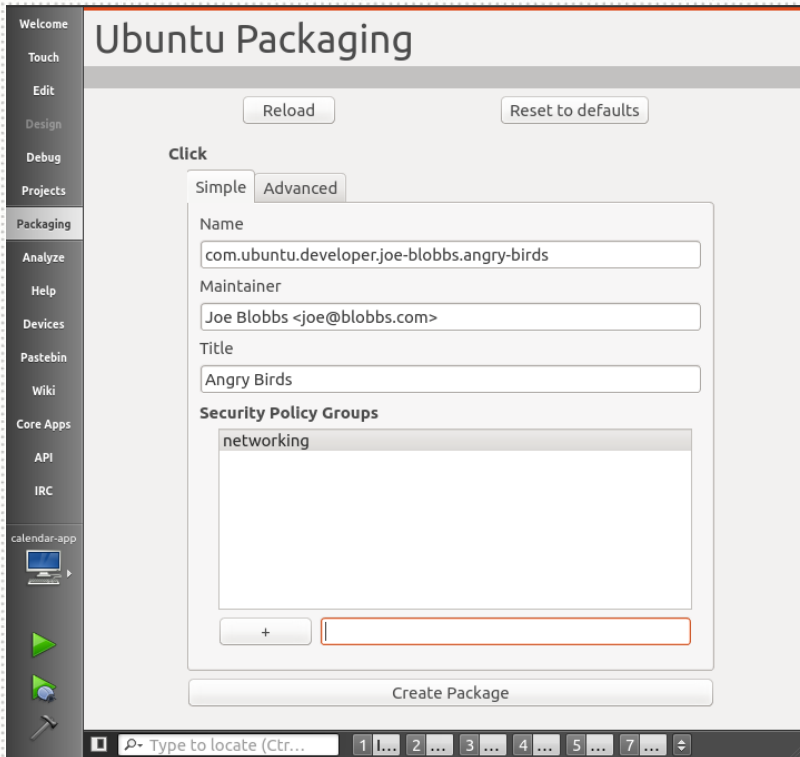
```
1 // Simple QML example
2 import QtQuick 2.0
3
4 Rectangle {
5     width: 200 // this is a property
6     height: 200
7     color: "blue"
8
9     Image {
10        source: "pics/logo.png"
11        anchors.centerIn: parent
12    }
13 }
```





HTML





- Simple packaging format
- Unpacks to a specified directory
- Contains a JSON manifest
- Configures: security policy, execution path, icon, etc.



ubuntu[®] app developer

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Ubuntu Touch Ubuntu Desktop





Your applications

Once you have submitted apps to Ubuntu Software Center, this is where you will have an overview of all your submitted applications. You will be able to see their status and how many have been downloaded.

Submit a new application

Icons
Easily identifiable icons.

Status
Shows the step your app has reached in the approval process.

Application	Status	Purchases
 Disappointed Dog	● Awaiting moderation	1 (\$0.01)
 Pontifical Pigeon	● Approved	0 (\$0.00)
 Cuddly Cats	● Rejected	1 (\$10.99)
 Smart Squirrel	● Published	1,098 (\$13,456.00)

App profile
From here you will be able to see all the information we have about your app. And you will also be able to edit!

Earnings
Get an instant overall view of your per-app earnings.

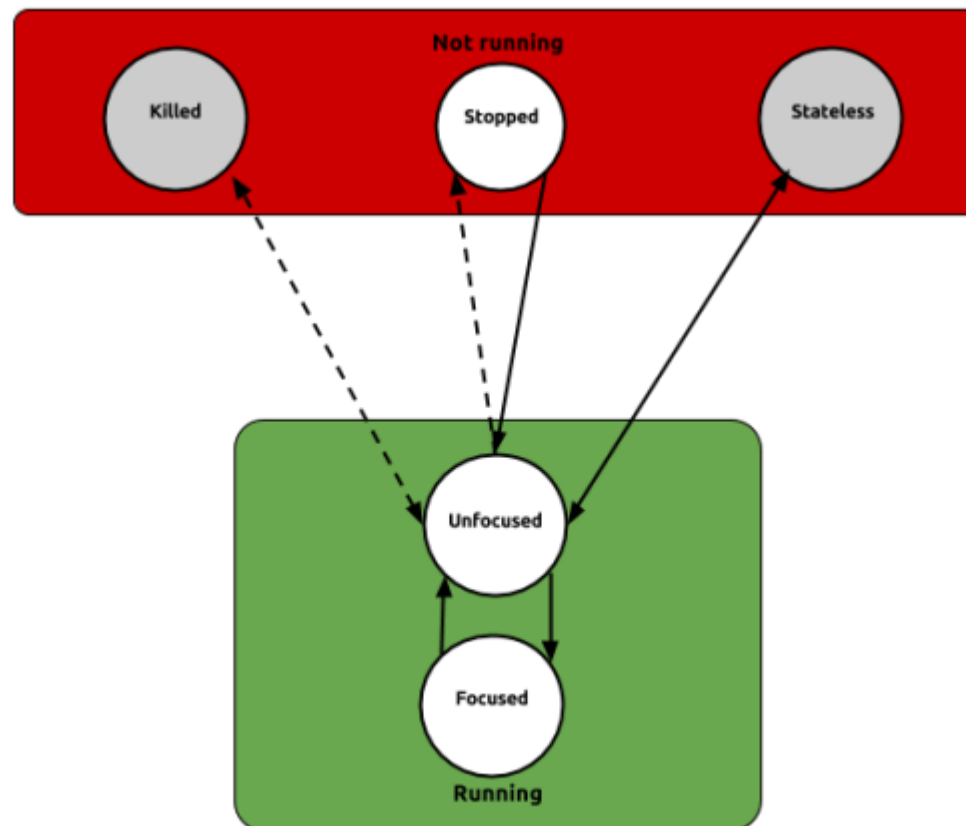
Submit a new application

What do I really need?



- Binary loadable by Linux Kernel
- Link to C libraries, the platform API library
- Being able to render to GL (probably via toolkit)

Application Lifecycle





- History of open and transparent governance
- Provided by Technical Board and other elected councils
- Inviting community based on shared values
- Allows for involvement of all types
- Join us!

Review





Questions please
Thank you

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