

BOINC / Android: Status

10th BOINC Workshop, Budapest
30 / 09 / 2014



Joachim Fritsch
Einstein@HOME

Max Planck Institute for Gravitational Physics Hannover, Germany

1. Introduction

2012, 2013, 2014

2. User Interface

Navigation Drawer, Project Attach, Social Media

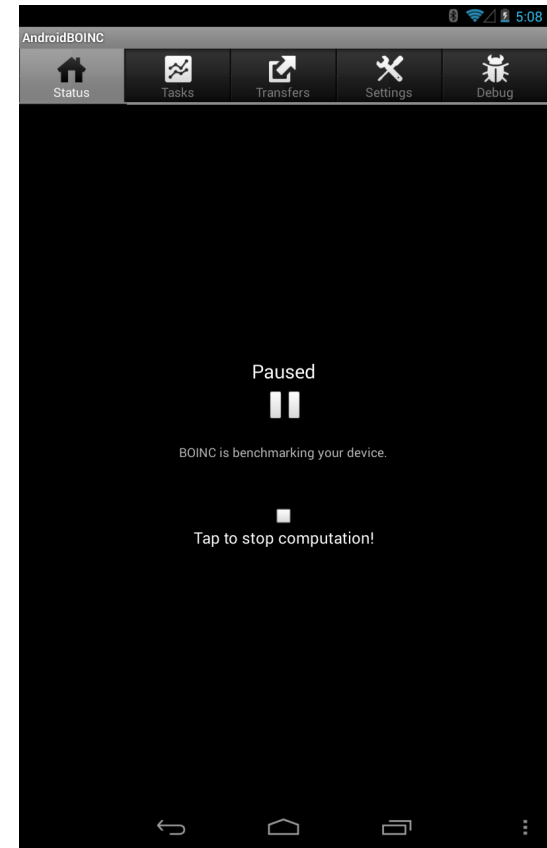
3. Under the Hood

UNIX Domain Sockets, Dalvik Process Separation, AIDL

4. Future Enhancements

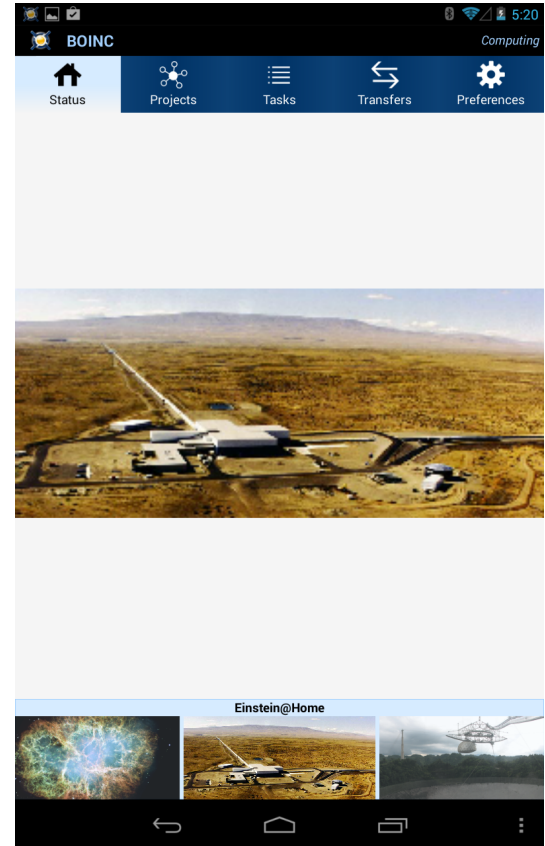
8th BOINC workshop London September 2012

BOINC on Android prototype



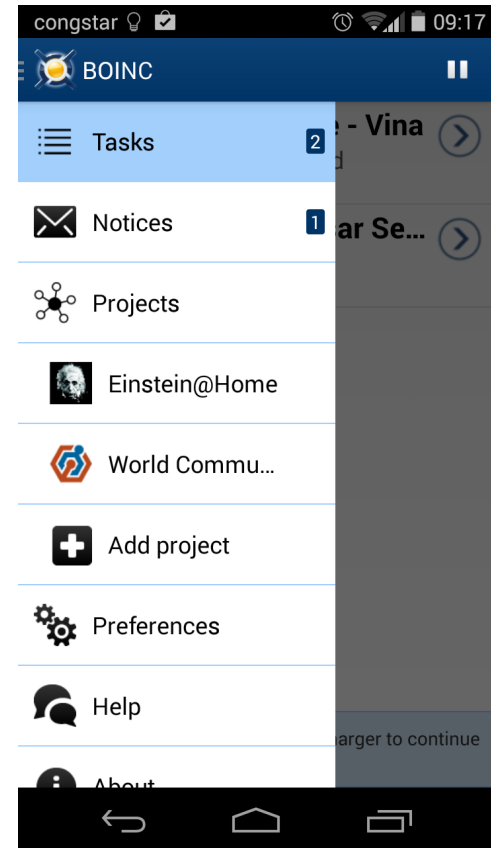
9th BOINC workshop Grenoble September 2013

Initial launch on GooglePlay



10th BOINC workshop Budapest September 2014

Advancement
26k users / 88k installs



10th BOINC workshop Budapest September 2014

HTC Power to Give
1.69m installs

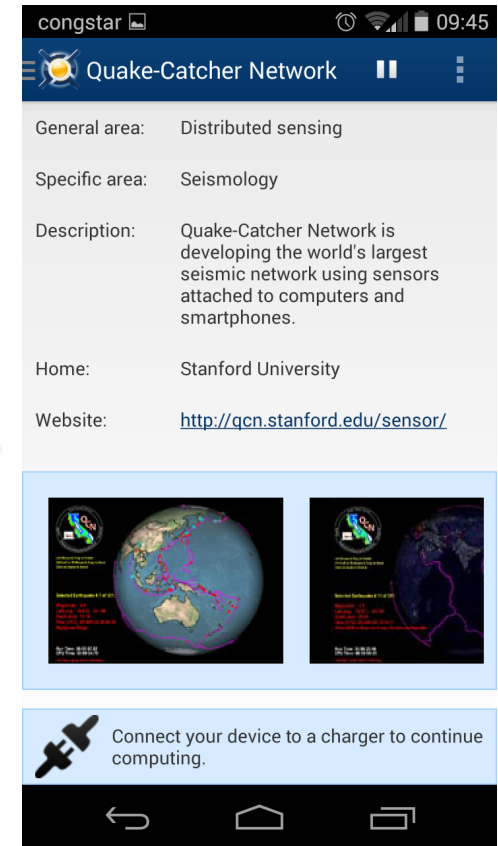
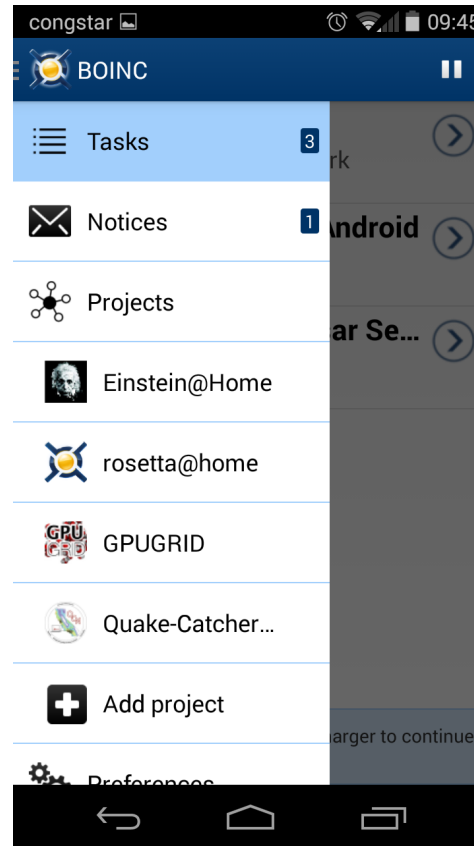
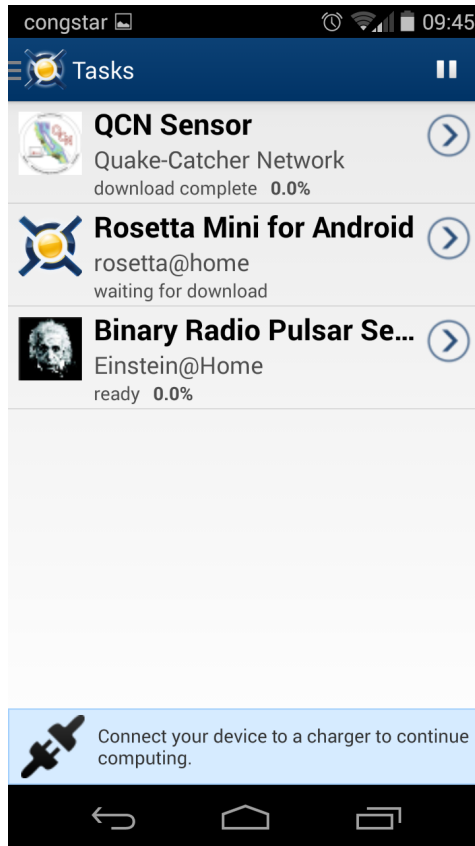


10th BOINC workshop Budapest September 2014

Samsung Power Sleep
100k+ installs

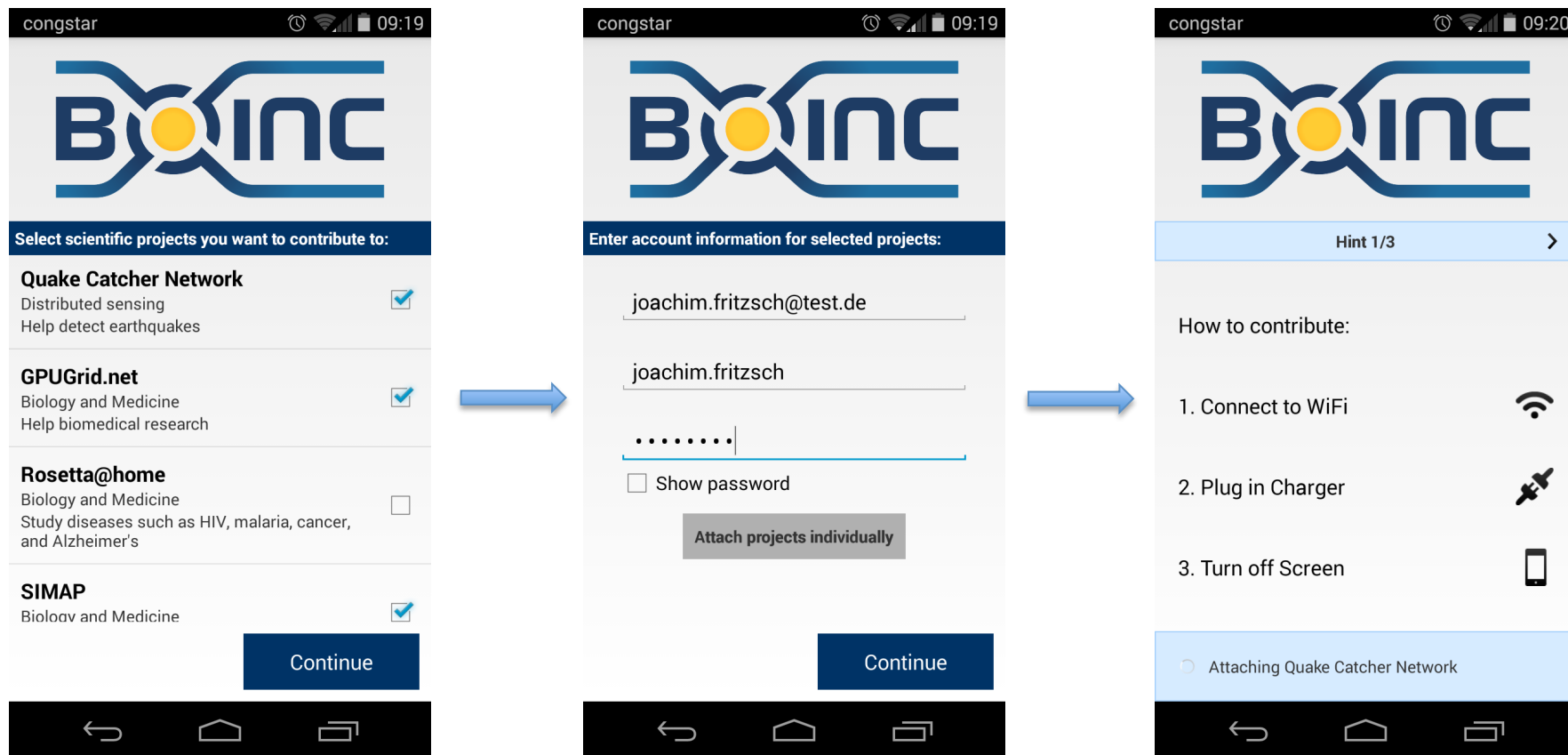


User Interface Advancement: Navigation Drawer



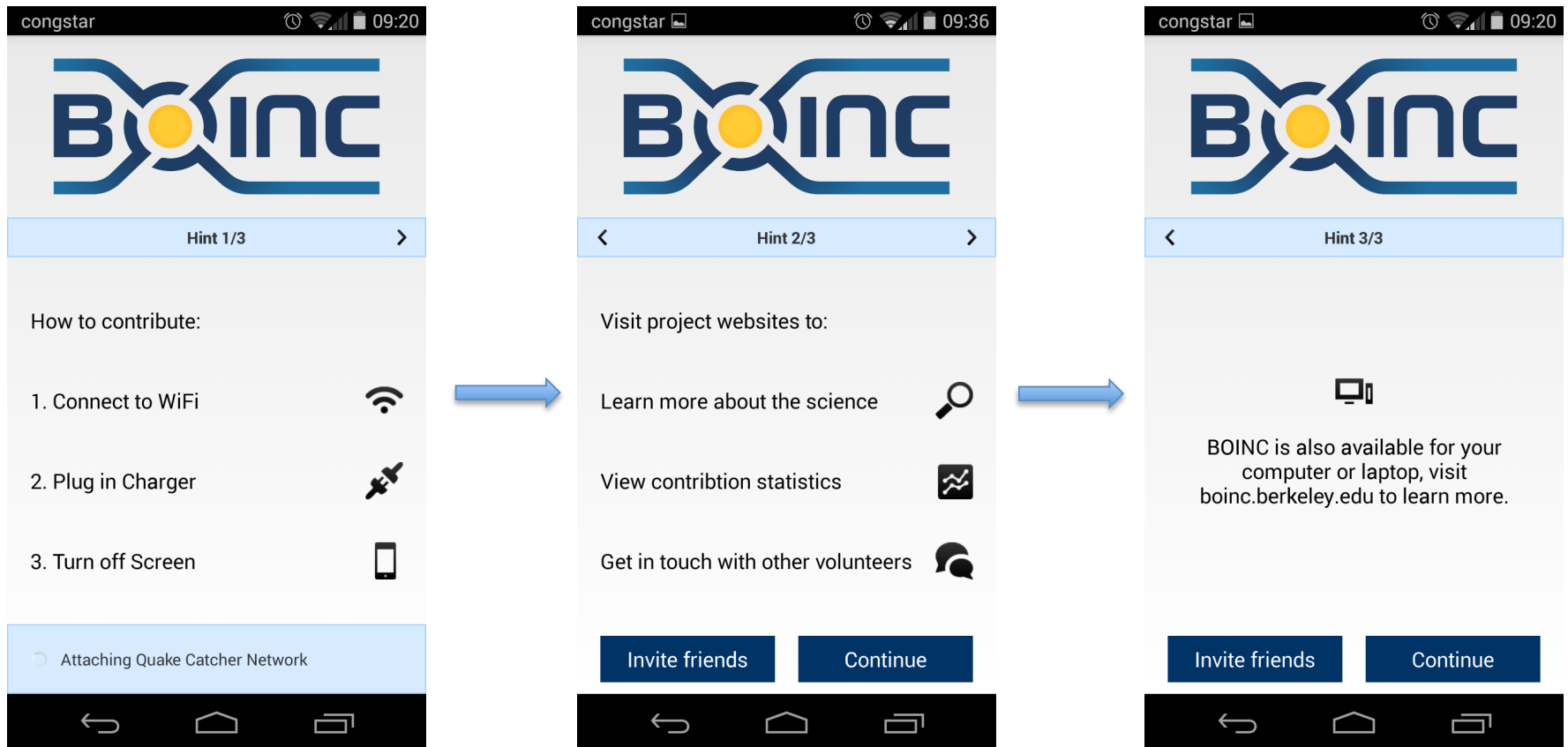
Adapted navigation drawer design pattern like most influential apps.

User Interface Advancement: Project Attach



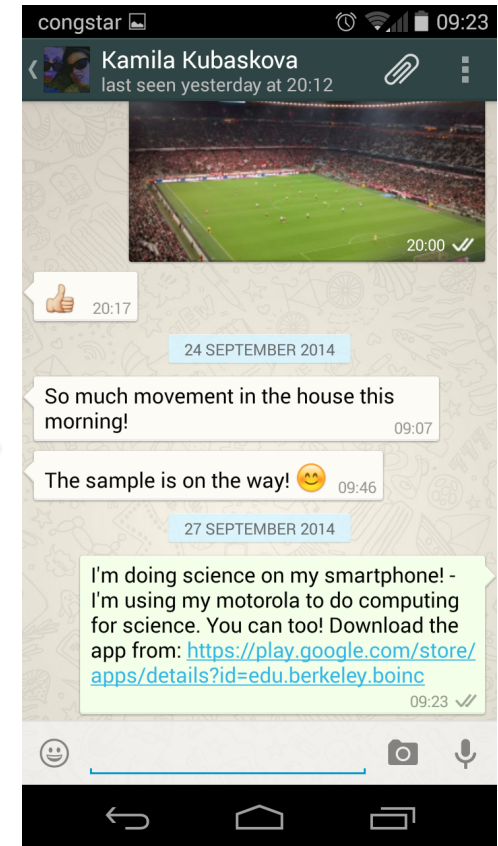
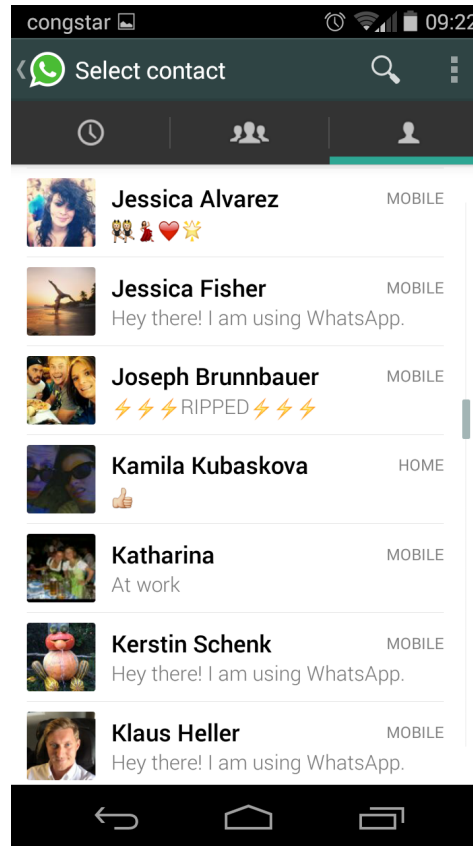
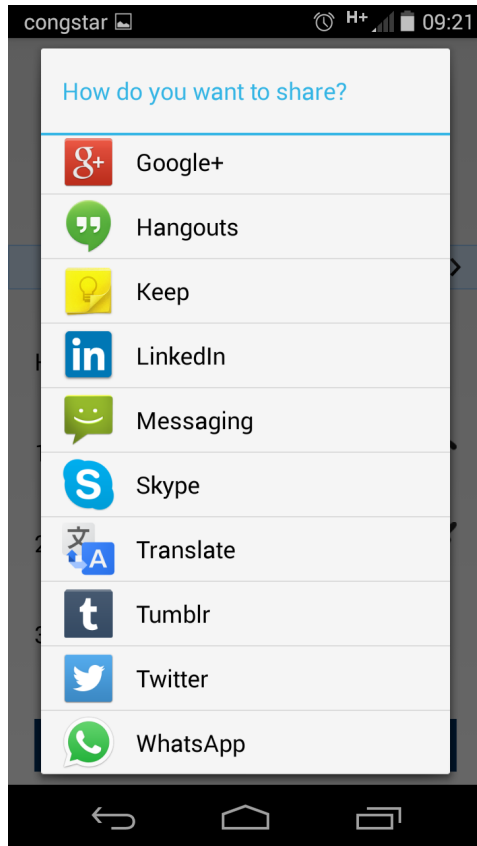
Attaching multiple projects at once with a single set of credentials...

User Interface Advancement: Project Attach



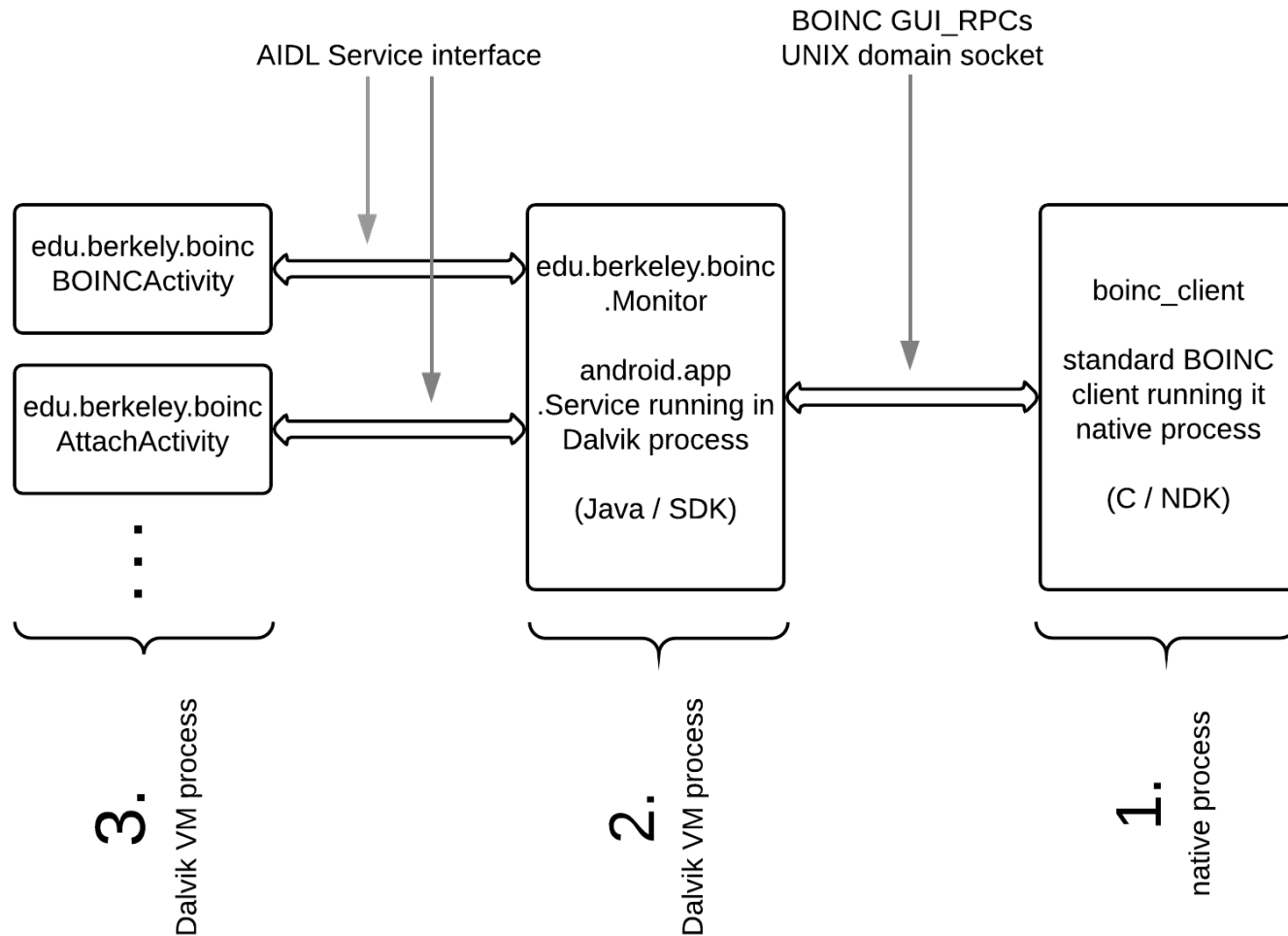
...while users can swipe through hints in the mean-time.

User Interface Advancement: Social Media

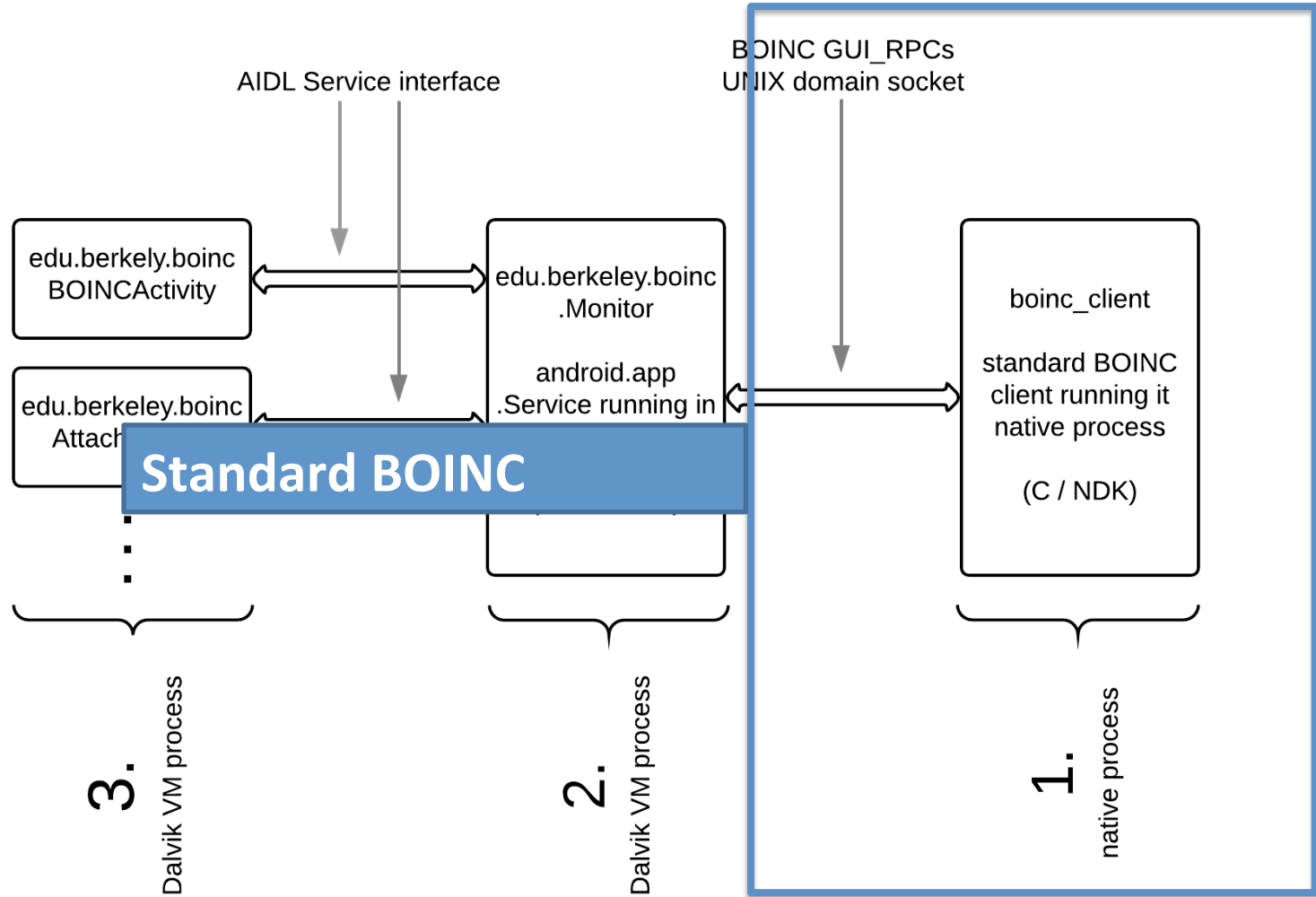


Users can share events on all social media or messaging services (facebook, twitter, WhatsApp, gMail, Skype, linkedIn, tumblr, ...)

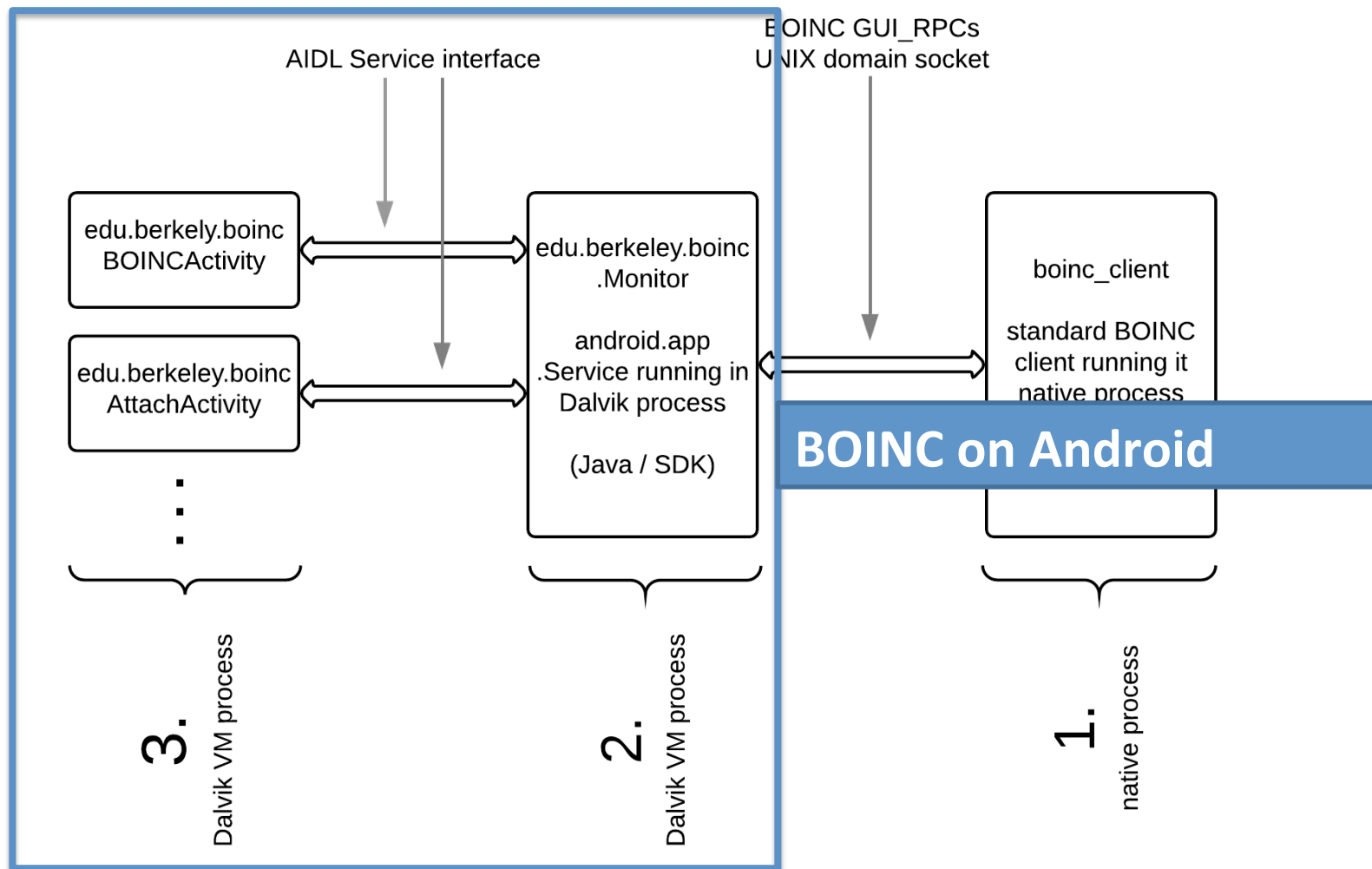
Under the Hood: A New Architecture



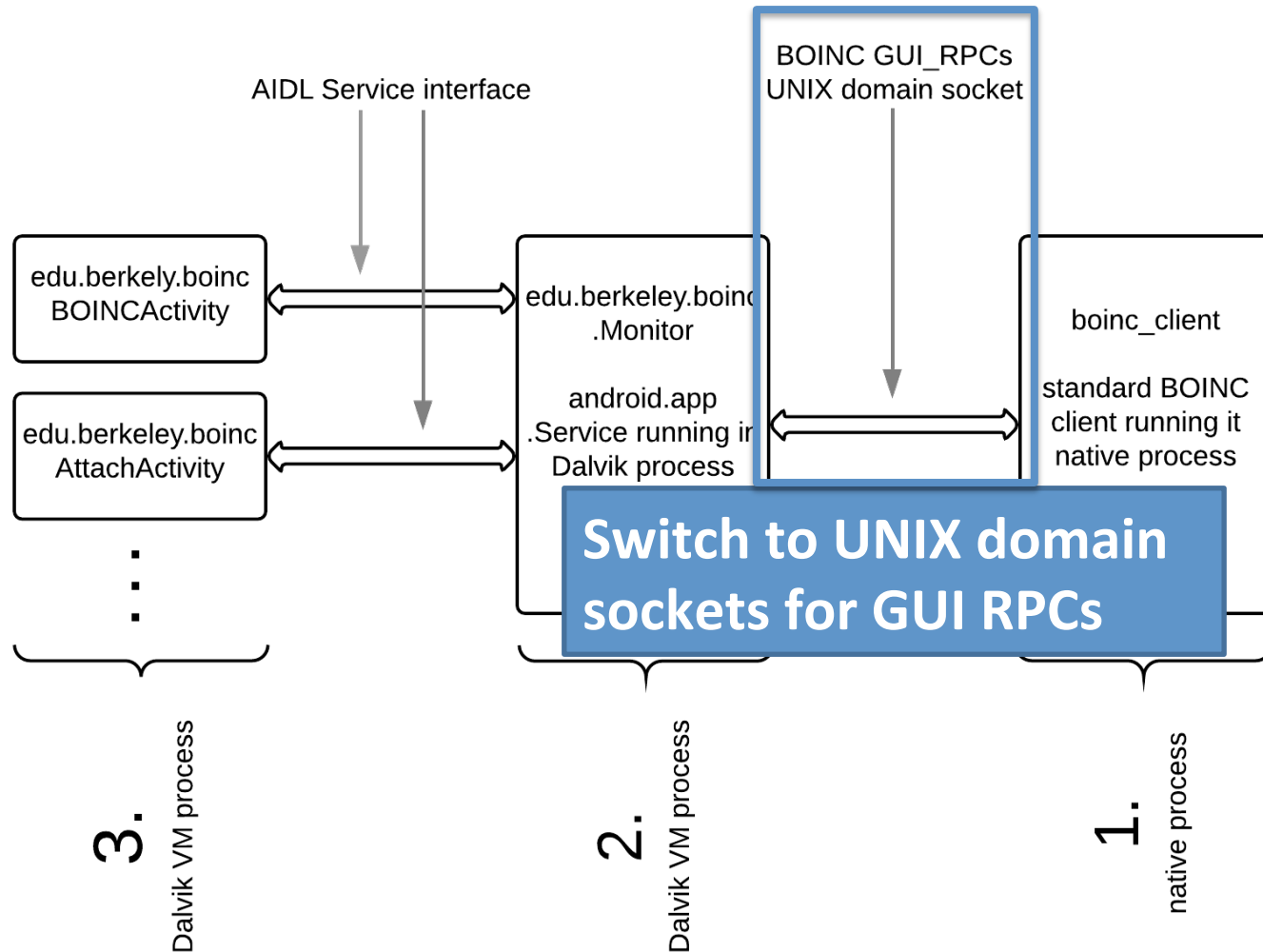
Under the Hood: A New Architecture



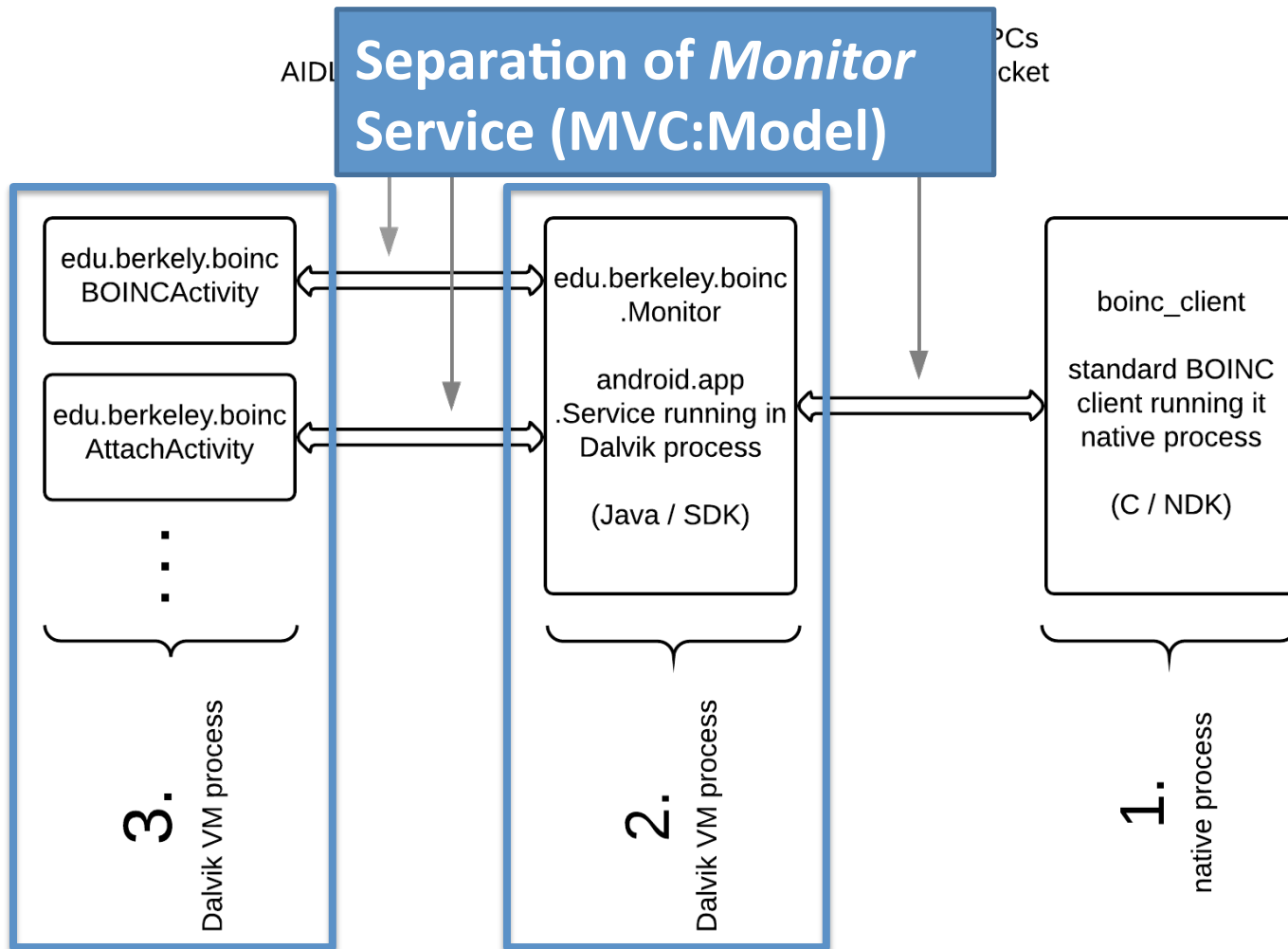
Under the Hood: A New Architecture



Under the Hood: A New Architecture



Under the Hood: A New Architecture

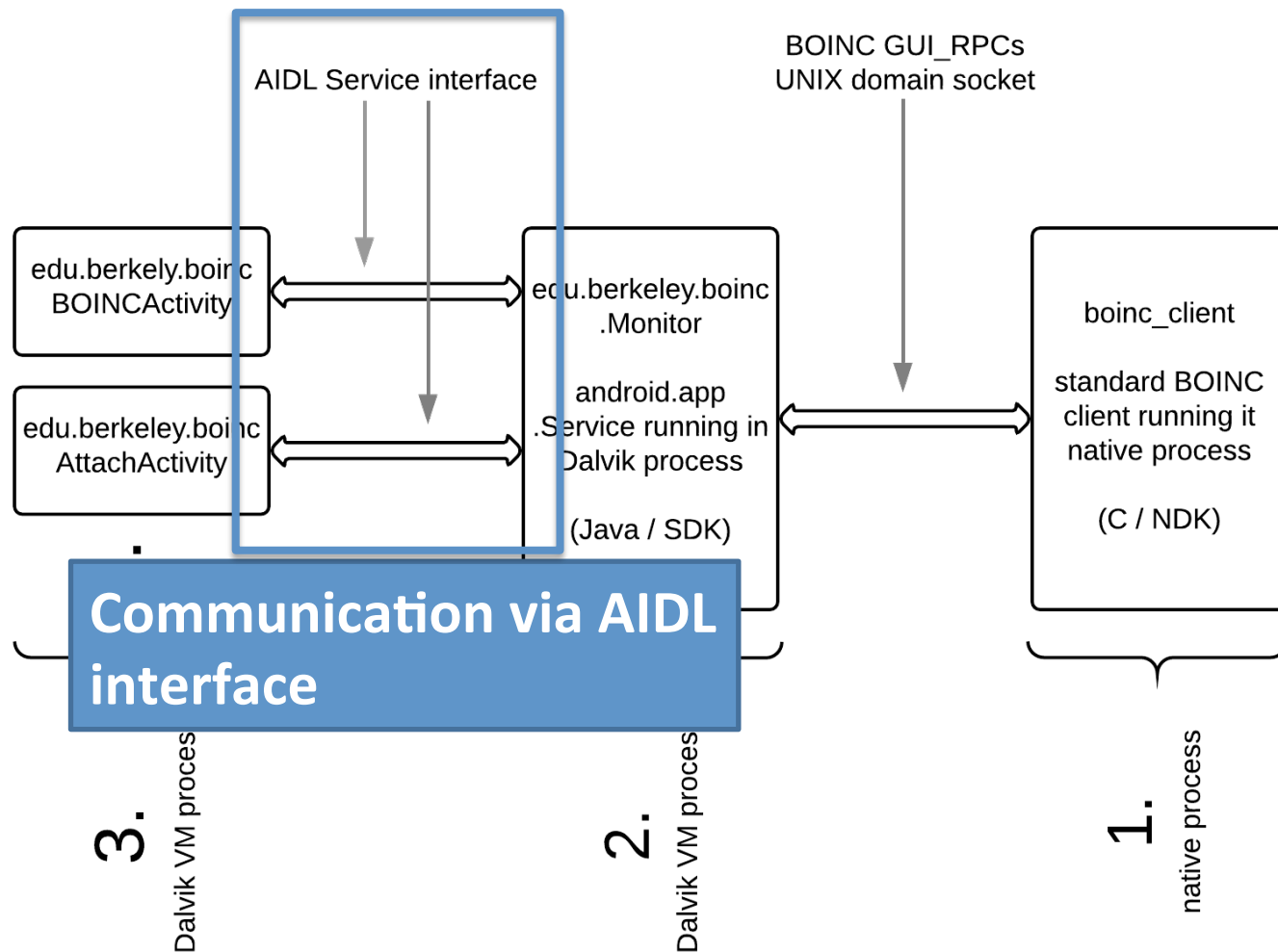


and Activities (MVC:View)
into distinct processes

Under the Hood

Joachim Fritzsich,
30. Sep 2014

Under the Hood: A New Architecture



Possible User Interface Improvements

- Merge of Tasks / Projects / Notices screens:
Group essential information together into single “Home” screen with less text and more visuals
- Contribution statistics:
Easily understandable information, e.g. total hours, hours on last run, completed tasks.
This information should be sharable on the social media mechanism
- Badges/Achievements:
For motivation, e.g. “attach your laptop, too”, “contribute 100 hours”, “fastest phone of the month” etc.

Thank you for your attention.



Download BOINC from PlayStore,

and join the discussion in our Android group at

<https://groups.google.com/forum/#!forum/boinc-android-testing>