

Measuring Mobile Vulnerabilities



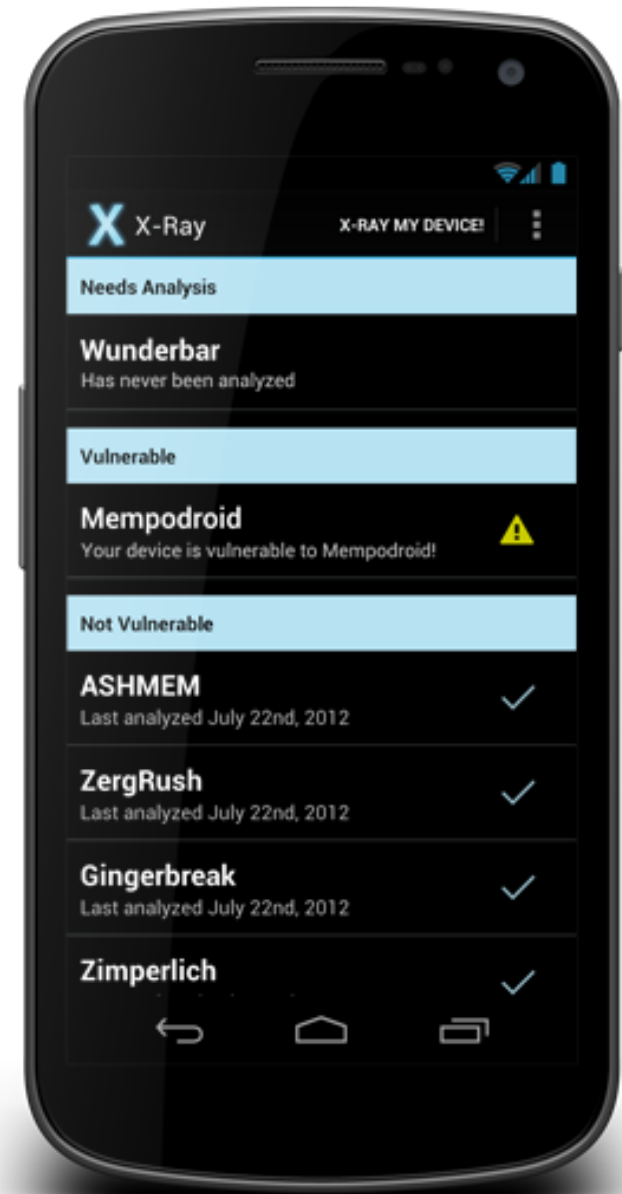
- **Complicated mobile software ecosystem**
 - Platform provider, OEM, carriers, third-parties
 - Unhardened platforms, customizations
- **Core platform vulnerabilities**
 - Accessible via malicious apps or client-side exploitation
 - Allows escalation of privileges to obtain full device control
- **Conservative patching practices**
 - Desktop: hours/days, mobile: months/years
 - Lack of penalties, inversion of incentives

X-Ray Vulnerability Assessment



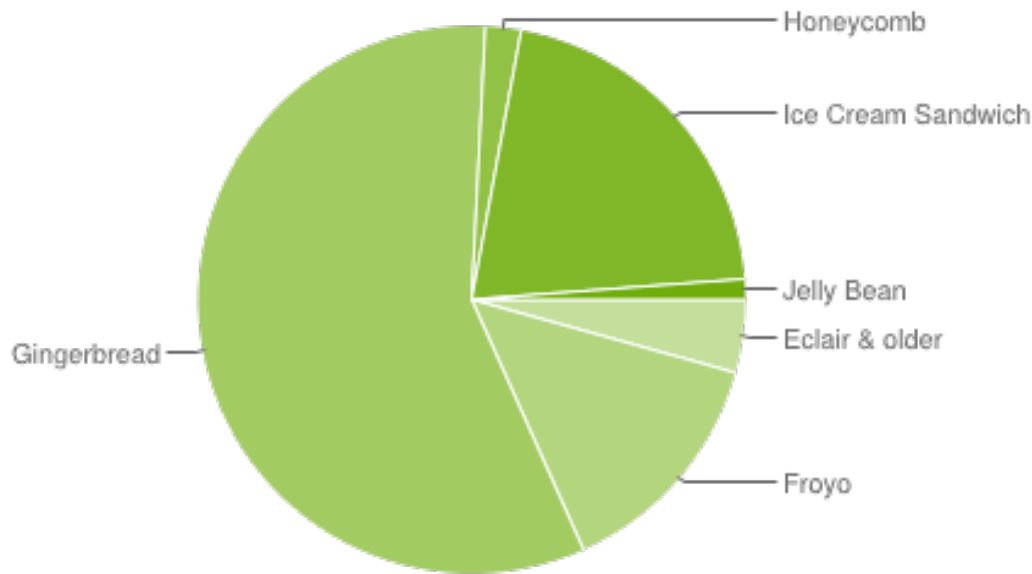
- X-Ray for Android
 - DARPA-funded research project publicly launched last year
 - Identifies 8 of the most common Android privilege escalation vulnerabilities
 - Freely available for end users to run

59,277 devices
1,602 models
151 countries



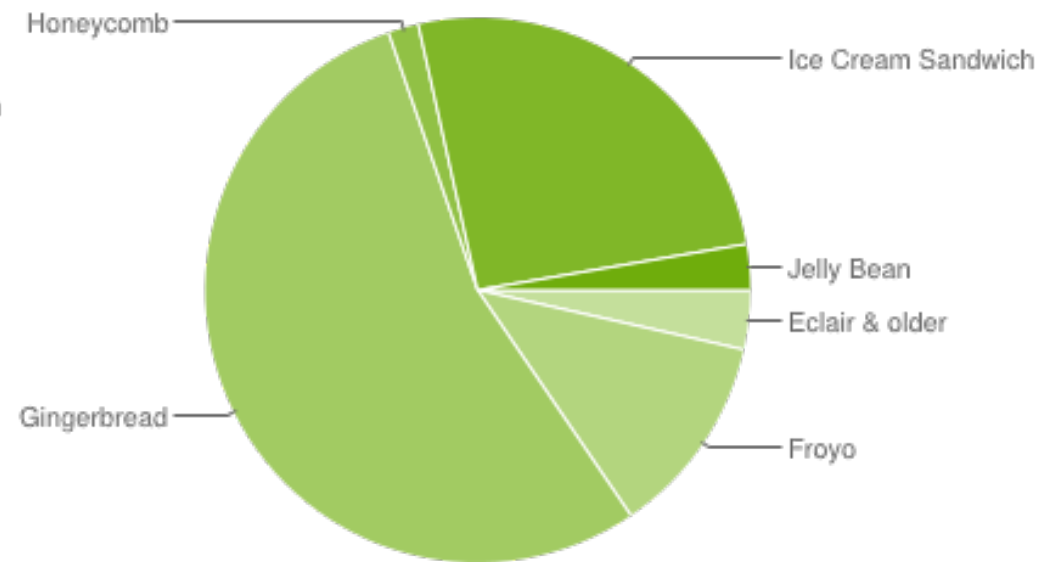
<http://xray.io>

Vulnerable Android Populations



August, 2012

60.6% vulnerable



January, 2013

52.3% vulnerable