



AndroidXRef :

Speeding up the development of Android Internals.

Android Builders Summit 2012 – Feb 13-14

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A Little Background...



What makes Android Great?

- API Documentation.
- Source Code Examples.
- Powerful IDE.
- Pre-built test environment.

It's all about **Availability.**



What makes Android Internals not so Great?

- No API Documentation.
- Fewer Programmers.
- Mostly restricted to manufactures.
 - Proprietary Code.

It's all about **Availability.**



Can we make it as easy as App
development?

NO!

Can we make easier?

YES!



The way around the code

- Grep.
- CScope.
- Eclipse.
 - Samsung Enterprise SDK.



A Simple Idea

- Linux Cross Reference: **lxr.linux.no**
- Online Cross Reference for the Linux Kernel.
- A stand alone system for online source indexing.
- Quick search and no setup time.

High **Availability.**



The birth of **AndroidXRef**

- Android Cross Reference: **androidxref.com**
- Includes the Android branch of the Linux Kernel.
- Currently has the source code of Android Ice Cream Sandwich.
- Plans to have all major versions of android available.



Powered by {OpenGrok

- Created by the Open Solaris team.
- Able to handle huge and heterogeneous projects.
- Instant search for symbols and definitions.
- Very rich parser able to identify almost all file types.
- Version control system aware.
- Ease of customization.



AndroidXref Environment

- OS:
 - CentOS 5, 32 bits: **Unstable**
 - CentOS 6, 64 bits: **Unstable**
 - Ubuntu 11.04 64 bits: **Stable**
 - Ubuntu 11.10 64 bits: **Stable**
- Hardware
 - OpenVZ, 512MB RAM – **Very Unstable**
 - XEN VM, 1024MB RAM - **Stable**
 - Core i7, 4GB RAM - **Stable**



But what else?

- Android development environment should be aware of proprietary code.
- Local installs allows for restricting the proprietary code to the inner network.
- Currently 2 options are available:
 - Pre configured Virtual Machine.
 - Step-By-Step guide for local setup.
- Modified source code available.



The SIDI Environment

- SIDI: Samsung Research Lab in Brazil.
- Focus in research for Mobile platforms.
- Develops customization and applications for Latin America Market.
- Develops enterprise solutions for the global Market.

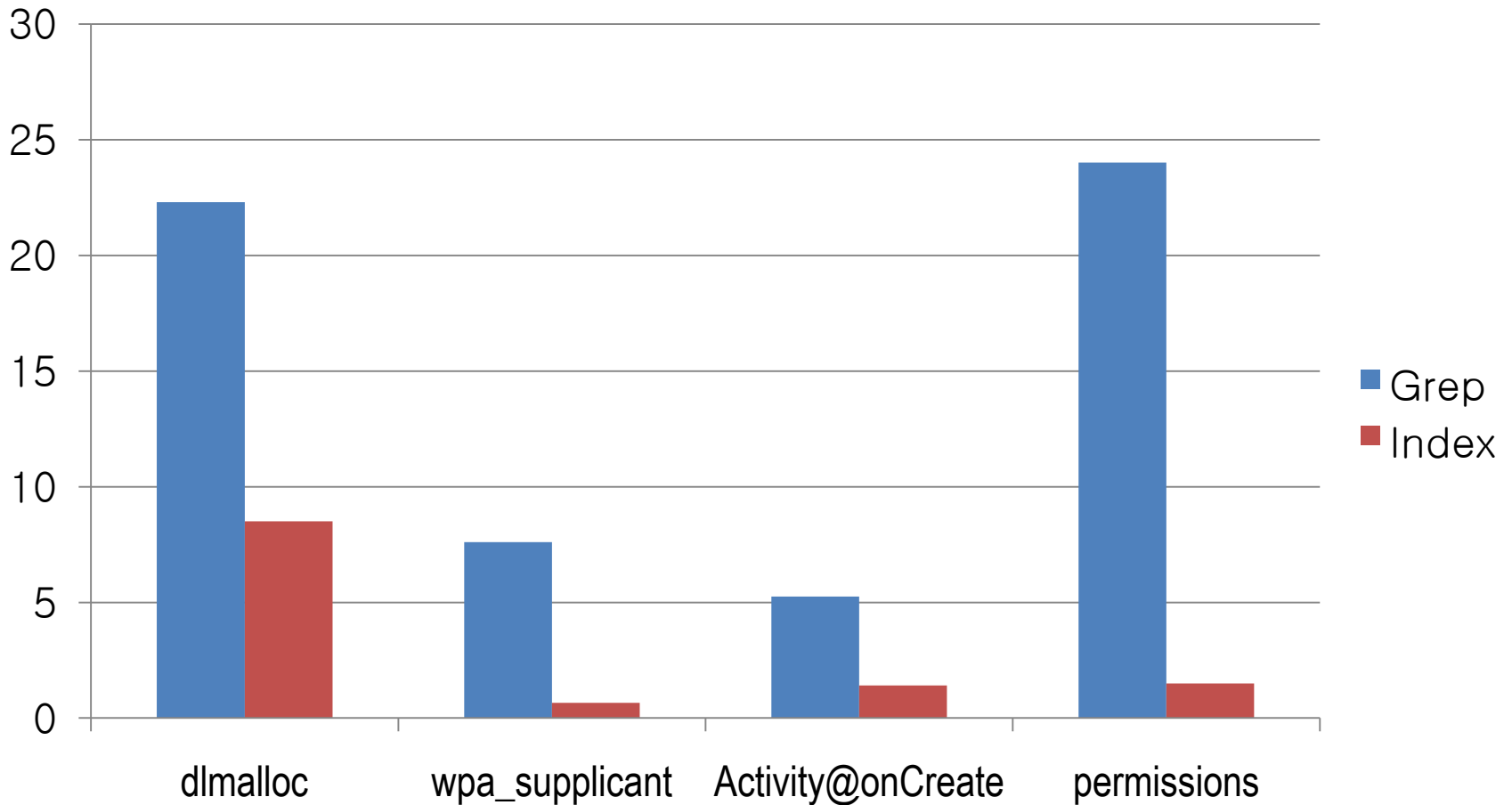


The SIDI Environment

- Global Solutions team:
 - Mainly focused in android products.
 - Manage multiple android version simultaneously.
 - Custom kernel and bionic versions.
- Local setup of AndroidXRef with the custom code.
- Fast Adoption.
- Low cost setup.



Timing Results



Next Steps

- Gather Contributors.
- Multiple Android versions.
- Multiple kernel versions.
- Updated VMs.
- Improve the Online Infra-Structure.
- Gather new Sponsors.



Questions?

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