

Android GPS

Key strategic decisions around Open Source

*note
2/20/05
Long
- Andy's
- Chris*



July 26, 2005

GOOGLE CONFIDENTIAL

Google™

*- (F: Embedded Linux
- Open source w/ rider
ensuring survival &
compatibility of
G services
- Chris*

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

TRIAL EXHIBIT 1

CASE NO. 10-03561 WHA

DATE ENTERED _____

BY _____
DEPUTY CLERK

HIGHLY CONFIDENTIAL -
ATTORNEYS' EYES ONLY

Oracle America, Inc. v. Google Inc.
3:10-cv-03561-WHA

GOOGLE-00-00001772

Agenda

- Status Update
- What is Android?
- Near-term strategic decisions
 - Which type of Open Source are we?
 - How do we interact with OSS community?
 - How do we Open Source our JVM?

July 26, 2005

GOOGLE CONFIDENTIAL



Status: Hide the food, Android is here

- **Where:** Building 41, second floor
- **Group meeting:** Presented to wireless team. Making contacts and working well as a group
- **Development status:** Perforce server installed. Engineers are coding again.
- **Strategy:** Working with Deep, Nikesh and others to help define Android strategy going forward.
- **GPS:** Full-fledged GPS at a future date.
- **Demo:** Available upon request.

July 26, 2005

GOOGLE CONFIDENTIAL



What is Android?

Project Android is building the world's first
Open Source handset solution with built-in
Google applications

July 26, 2005

GOOGLE CONFIDENTIAL

Google™

The Model

Google works closely with Carriers and OEMs to help incorporate its Open Source OS into handset designs.

- The Carriers benefit from the ability to quickly deploy differentiating features and applications.
- The OEMs benefit from the above, and a dramatic reduction in BOM costs by utilizing a robust, free consumer OS platform.
- Google benefits by having more control of the user experience and built-in Google apps.

July 26, 2005

GOOGLE CONFIDENTIAL



Why Open Source*

To disrupt the closed and proprietary nature of the two dominant industry players: MSFT and Symbian

To provide Carriers and OEMs a non-threatening solution for cross-vendor compatibility

To eventually build a community force around Google handset APIs and applications

* Our OSS license is a rider on a mainstream license such as Mozilla that requires licensee to maintain compatibility with Google APIs

July 26, 2005

GOOGLE CONFIDENTIAL

Google™

Which OSS Model?

- Build product

A strategy where development happens internally, and once product has reached a certain level of stability it is released as open source.

- Community effort

A strategy where development is a collaborative effort between internal Google resources and a larger more diverse community of external Open Source developers. Typically there is a publicly accessible source code repository with a informal check-in procedure.

July 26, 2005

GOOGLE CONFIDENTIAL



JAVA

- Why Java?
 - Carriers require it
 - MSFT will never do it
 - Elegant tools story
 - Safe sandbox for 3rd party developers
 - Existing pool of developers and applications
 - Who pays? OEM pays sun a license, typically < .30 in volume

July 26, 2005

GOOGLE CONFIDENTIAL

Google™

JAVA

- Java + Javascript/XML = Key differentiator

Current scenario:

- Developing a clean-room implementation of a JVM
- Need coffee-cup logo for carrier certifications
- Must take license from Sun
- Cost isn't the issue, open source JVM is the issue

Proposal:

- Google/Android, with support from Tim Lindholm, negotiates the first OSS J2ME JVM license with Sun
- Outcome could reinforce our JVM development, or perhaps result in us convincing Sun to Open Source their JVM implementation.

July 26, 2005

GOOGLE CONFIDENTIAL



End.

July 26, 2005

GOOGLE CONFIDENTIAL

Google™