**DELTA++: Reducing the Size of Android Application Updates**

**ABSTRACT:**

This method of creating and deploying update patches improves on Google Smart Application Update by first unpacking the Android Application Package and then compressing its elements individually. The smartphone user can then download a smaller patch. Experiments show that performance yields 49 percent more reduction relative to Google’s solution, increasing the savings in cellular network bandwidth use and resulting in lighter application server loads. This reduction in Android application-update traffic could translate to a 1.7 percent decrease in annual US cellular traffic. Similar methods applied to iPhone application updates could yield even greater savings.

**EXISTING SYSTEM:**

To reduce application update traffic, Google developed Google Smart Application Update, which uses a compression method transparent to application developers and Android users. Modifications to the Google Play application and the server software enable Google Play to construct new versions of updated applications by applying a patch to the application version installed on the user’s Android device. Although this solution has made inroads into traffic reduction, its compression methods are not optimal.

**DISADVANTAGES OF EXISTING SYSTEM:**

DELTA could successfully decrease application update traffic and enable savings in the cellular network and data centers but we want much more.

**PROPOSED SYSTEM:**

Notably, delta encoding is at the Android Application Package (APK) level only, which limits the possible reduction in patch size. To address this shortcoming and reduce update traffic even more, we extended our Delta Encoding for Less Traffic for Apps (DELTA), an update mechanism based on the bsdiff delta encoding tool.

We have implemented DELTA++ as server side software, which constructs update patches and serves them by request, and as an Android application that deploys the received patches and updates the installed applications.

**ADVANTAGES OF PROPOSED SYSTEM:**

* Unlike Google Smart Application Update, DELTA++ unpacks the A PK and then compresses its individual modules. Our experimental results show that DELTA++ can reduce application update size by 77 percent on average, relative to a 55 percent average size reduction possible with Google Smart Application Update.
* Our experiments show that additional battery use is negligible.
* Although DELTA++ is clearly superior to Google Smart Application Update in patch size and traffic reduction, its advantage in deployment time is less straightforward.

**SYSTEM REQUIREMENTS:**

**HARDWARE REQUIREMENTS:**

* System : Pentium IV 2.4 GHz.
* Hard Disk : 40 GB.
* Floppy Drive : 1.44 Mb.
* Monitor : 15 VGA Colour.
* Mouse : Logitech.
* Ram : 512 Mb.
* MOBILE : ANDROID

**SOFTWARE REQUIREMENTS:**

* Operating system : Windows XP/7.
* Coding Language : Java 1.7
* Tool Kit : Android 2.3 ABOVE
* IDE : Eclipse

**REFERENCE:**

Nikolai Samteladze and Ken Christensen University of South Florida“DELTA++:REDUCING THE SIZE OF ANDROID APPLICATION UPDATES ”2014