Aspire :: Near Field Communication (NFC) Components
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This section describes the NFC components developed in the Aspire project.

Context

Near Field Communication (NFC) Near Field Communication (NFC) is an evolution of short-range RFID. This high-frequency wireless communication technology enables devices such as mobile phones or tags to exchange data over a few centimeters distance. Since NFC is an extension of the ISO 14443 standard, NFC devices are compatible with already existing contactless infrastructures (e.g., RFID tags or public transportation systems). NFC technology targets mainly mobile phones which can therefore be used in three different ways. A NFC mobile phone can behave as a common RFID reader, it can be read or write to/from a contactless card or even be used in peer-to-peer mode: two NFC devices can communicate and exchange information. NFC Forum The NFC Forum promotes the use of NFC short-range wireless interaction in consumer electronics, mobile devices and PCs. The NFC Forum provides also the standardization of NFC technology to ensure interoperability between devices and services. APIs JSR 257: Contactless Communication API The JSR 257 specification defines J2ME Optional Packages for (NFC, Visual, ...) contactless communication and for accessing (read or write) information on/from passive tags (NFC mainly). Android NFC API Soon

Source repository

- Source repository

Components

General-purpose components

- NDEF Utilities

Terminal side components J2ME

- Touch and Collect MIDlet
- Touch and Locate MIDlet

Android Open-source NFC stacks have been recently annonced :

- NXP and Trusted Logic
  - ° http://www.nxp.com/news/content/file_1700.html
- Inside Contactless
  - ° http://www.insidecontactless.com/eng/Vision/Press-releases/INSIDE-CONTACTLESS-RELEASES-OPEN-SOURC
  - ° http://www.open-nfc.org/
  - ° http://www.open-nfc.org/android.html
  - ° http://www.open-nfc.org/opennfc_library/reference/packages.html

iPhone

- http://www.nearfield.org/2009/11/iphone-rfid-and-nfc-peripherals

Java Platform SE

- Touch and Launch Desktop (ie Tangible desktop)

Server-side components Server-side components are packaged as OSGi bundles and can be deployed on OSGi platforms such as the OSGi profile of the ALEServer.

- Bluetooth Server

Demonstrations

- NFCMuseum
- The Patrol Man
- Touch and Collect
- Touch and Locate
- Touch and Launch

Misc

- The OW2 GASP develops also multiplayers mobile games with NFC features.

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