

# IMS Sipdroid User Guide

## 1.0 Introduction

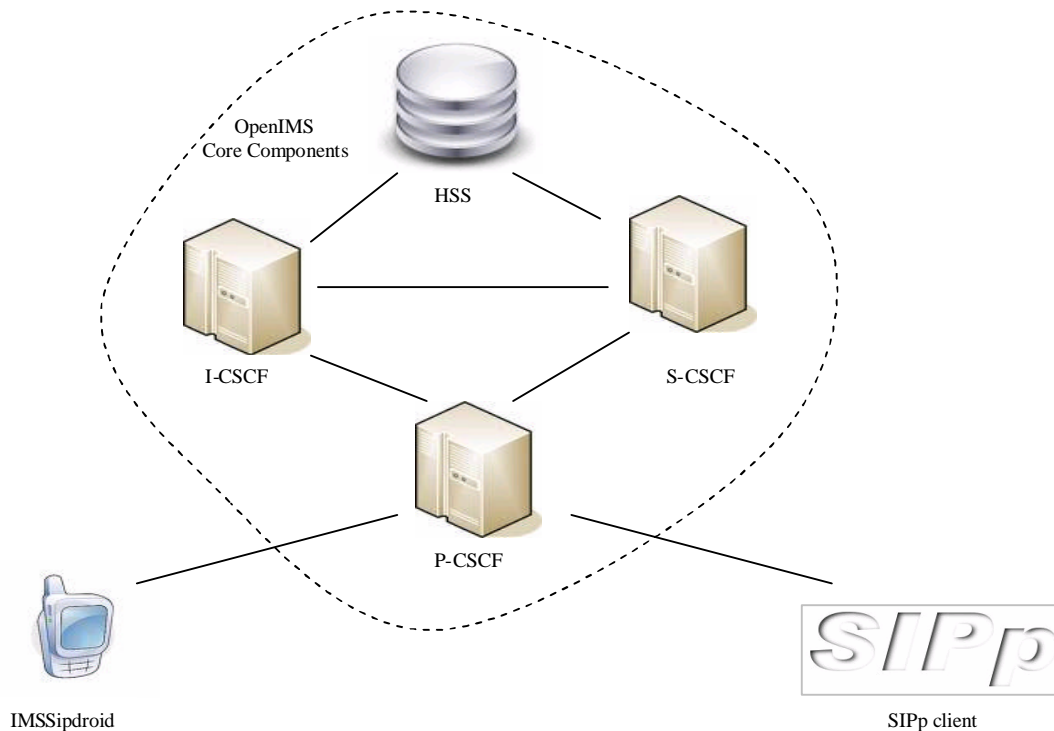
IMS Sipdroid is a basic IMS client for Google Android Mobile Platform. IMS Sipdroid has been built on top of Sipdroid (the SIP UA) which was released earlier (<http://www.hsc.com/resourceCenter/resource.aspx>) by [Hughes Systique](#) (HSC).

IMS Sipdroid is a Google Android based basic IMS client capable working in an IMS network. IMS Sipdroid and MjSip have been both released under GPL and we welcome contributions from the entire developer community to enhance and improve it.

## 2.0 Prerequisites

Refer to the Sipdroid User Document for the setup procedure of Sipdroid.

## 3.0 Network Setup



**Figure 1 Network Setup**

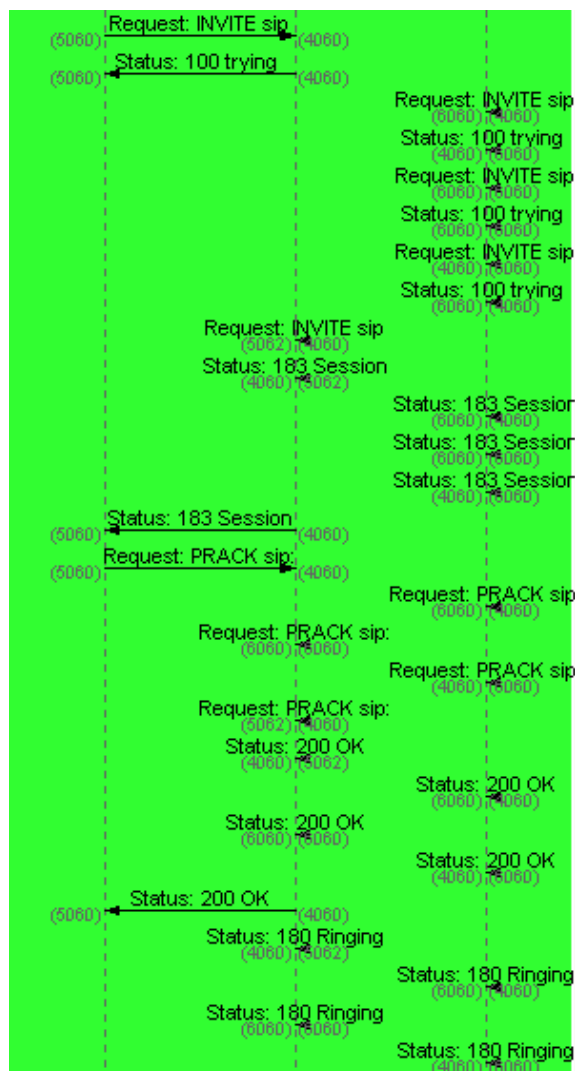
The typical network setup comprises of the following components:

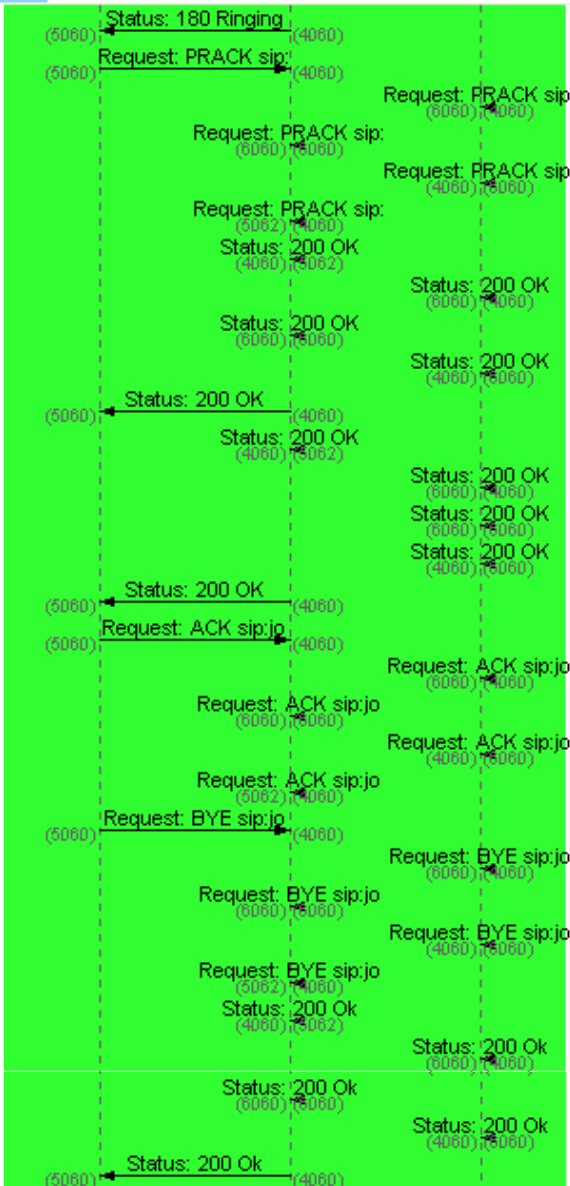


1. OpenIMS Core Components:
  - a. P-CSCF
  - b. I-CSCF
  - c. S-CSCF
  - d. HSS
2. Google Android based IMS Sipdroid client
3. SIPp (<http://sipp.sourceforge.net/>) as an IMS UAS

## 4.0 Test Scenario

IMS Sipdroid was successfully tested with the following call flow:





## 5.0 Features

- PRACK support
- Client capable of working in both IMS and non IMS mode.
  - For the IMS mode, user needs to configure the P-CSCF address in the configuration file and then initiate registration. After registration, client will use the received S-CSCF address in the Route header whenever a new call is initiated.



- In non – IMS mode, client will work as a standard SIP client. There is no configuration for the SIP client. In case registration is needed, registrar address needs to be specified in the configuration file.
- IMS Registration needs to be initiated before first call is made
- P-CSCF address needs to be configured in available configuration file
- Tested with the following other clients
  - OpenIC Lite
  - IMS communicator

## **6.0 Caveats**

- IMS Sipdroid was tested with a SIPp script for PRACK functionality. Other available IMS clients did not support PRACK functionality.
- PRACK support is implemented for the client side. When the client initiates a call and receives 1xx response with Require: 100rel as header, it will respond with PRACK. However in case client receives INVITE with Supported: 100rel header, it will respond with 180 Ringing without Require: 100rel header.