

## Overview



The SamKnows Smartphone App offers a scalable way of measuring end-to-end service quality as experienced by consumers. The Smartphone App provides real-time performance measurements without needing to install or configure any hardware.

Once installed the App runs a series of passive and active tests that measure mobile broadband performance and gather network information. The results of the tests are securely transmitted to hosted backend infrastructure for processing and presentation through a web interface in real-time.

The Smartphone App can give Service Providers and Regulators an economical mode of measuring coverage and end-user performance all in real-time. SamKnows architecture can process data from millions of Smartphones Apps simultaneously.

## Core Features

### Flexible Test Scheduling

The Smartphone App allows multiple modes of test scheduling including time-based (scheduled) testing and push-to-test.

### Real-time Reporting

All test result data is available in real-time on the Smartphone and via the SamKnows Analytics.

### Easy Distribution and Installation

The Smartphone App is distributable through the App store and installation is easy and straightforward.

### Auto Configuration

The Smartphone App is able to update its test and schedule configuration automatically.

### Location Mapping

Using the Smartphone's GPS capability it is possible to accurately record the location of where a measurement took place. When the GPS is not available, WiFi triangulation or Mobile Network triangulation is used instead.

## Measurement capabilities

The Smartphone App can perform the following IP tests:-

- ➔ Download throughput
- ➔ Upload throughput
- ➔ UDP latency
- ➔ UDP packet loss
- ➔ UDP Jitter

These measurements are run against SamKnows's network of test nodes. These are dedicated servers either on-net (on the local ISP's network) or off-net (on the public Internet).

The Smartphone App can also passively monitor and record service status to provide a view of the availability of voice and data services. This includes ancillary information related to the service under test such as MNC, RSSI, Bearer Type, LAC, Cell ID and more. *Note: Due to the restrictive nature of the iOS platform there are limitations on what data can be collected from iPhones.*

## Specification

Smartphone	
Operating Systems	Android 2.1 or greater Apple iOS
Mobile Bearer Support	GPRS, EDGE, 3G, CDMA , LTE , Wi-Fi
Distribution	Google Play Store Apple App Store