

# **WIT VoWiFi**

**Leverage Wi-Fi  
for voice calling**

[vowifi.wit-software.com](http://vowifi.wit-software.com)



# Operators' Challenges

- Low market penetration of Android devices supporting Wi-Fi Calling natively.
- Network coverage solutions for in-building and over-populated areas are expensive.
- Lack of appealing voice and messaging solutions for roaming customers.
- Apple network certification for Wi-Fi Calling on iPhone is difficult to achieve.

# Why is this important?

## For Mobile Operators

- Offload traffic from cellular to Wi-Fi networks.
- Increase network coverage.
- Reduce cost of femtocells and repeaters.
- Increase customer satisfaction.

## For Fixed Line Operators

- Extend the value of the fixed line number by extending the reach to mobile devices.
- Start the convergence of fixed and mobile networks.
- Maximize quality of calls by choosing the highest rated Wi-Fi network.

## For Subscribers

- No more network coverage problems.
- Calls and messages in multi-devices.
- Ability to call anyone and be reached anywhere with their own phone number.
- Keep a unique voice provider.
- Maximize the quality of calls by choosing the highest rated Wi-Fi networks.



# Features

## Whitelist Wi-Fi Network

- User selects the trusted Wi-Fi networks to use the service.
- App registers automatically for VoIP-in and SMS-in when entering whitelisted Wi-Fi networks.

## VoIP out

- App initiated calls are routed to the CS Network.
- User continues to make calls from a phone without cellular network coverage.
- User can also make calls from the PC, Tablet and Web browser.

## Multi-device VoWiFi

- iPhone, Android, iPad, Android Tablet, Windows, Mac and all Web browsers.

## Handover from Wi-Fi to 4G

- Leverage existing DR-VCC capabilities on the network.
- Provide call continuity from VoWiFi app to the native dialler.

## SMS out

- Send text messages from a phone even without cellular network coverage, by using a Wi-Fi.
- Send text messages from the PC, Tablet and Web browser.

## VoIP in

- User receives calls inside the App when connected to Wi-Fi.
- Rings sequentially or in parallel on all user devices.

## SMS in

- WCAS registers message copy in the SMSC.
- SMS is received in all registered user devices.
- Android App is able to intercept native SMS.

## Connection to ePDG

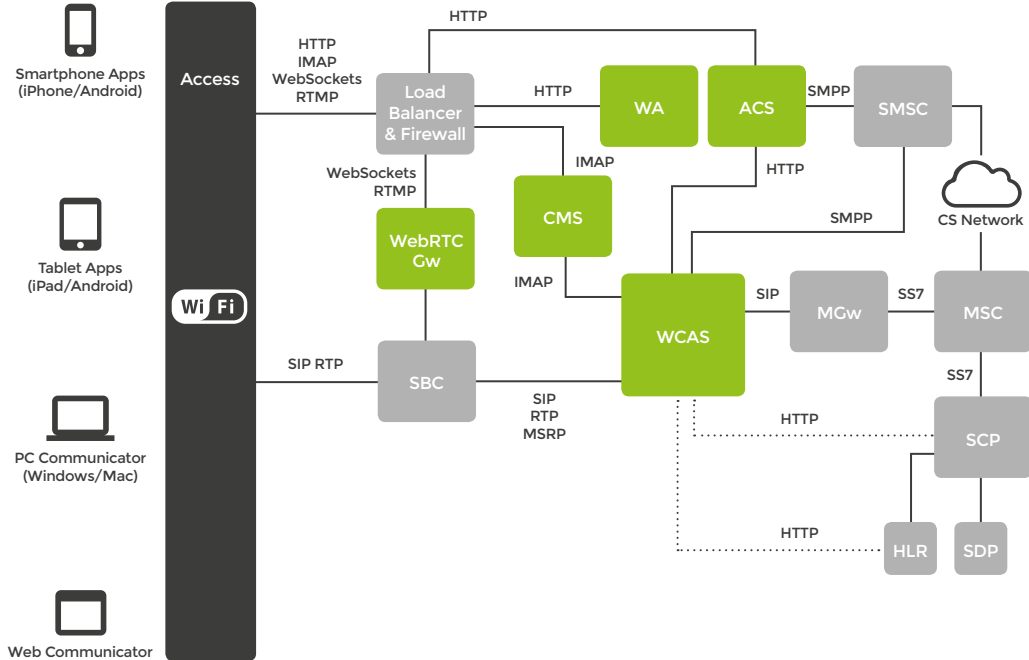
- IPSec tunnel between WIT Apps and the ePDG using EAP-TLS.
- Use certificates to remove the dependency on SIM authentication, allowing SIM-less devices.



## Pre-IMS Network

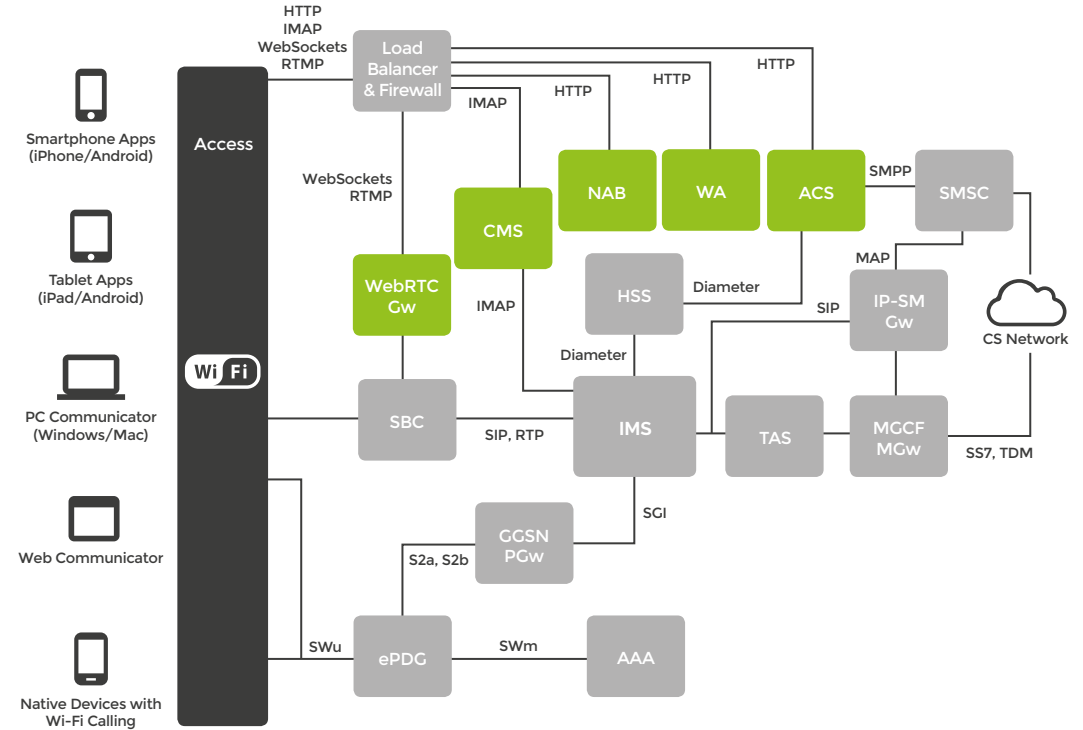
# Deployment Scenarios

## IMS Network



**ACS** Auto-Configuration Server

**CMS** Common Message Store



**NAB** Network Address Book

**WCAS** WIT Communications App Server

## WIT VoWiFi vs Native Wi-Fi Calling

- Users are able to select the Wi-Fi networks.
- WIT solution works on multi-devices: Smartphones, Tablets, PCs and Web browsers.
- Lower investment with less impact on the core network.
- Possibility to have rich in-call services, like image, video and location sharing.

## Why should you launch VoWiFi?

- Avoid coverage problems and allow users to take advantage of good Wi-Fi in the office and at home.
- Enable “roam like home” at reasonable prices.
- Provide knowledge about Wi-Fi quality to end-users.
- Be innovative and allow communication from all user devices.



## Why WIT?

- Track record on innovation.
- Re-use the same ePDG infrastructure as native Wi-Fi calling.
- Already integrated with 2 different ePDG gateways.
- 17 years of experience on IP communications.



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