The What, Why, When and How of VoWiFi

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2015
The year Voice over Wi-Fi moved from novelty to necessity
What is VoWiFi?

- The same mobile number
- The same mobile services
- The same user experience
- Across cellular and Wi-Fi
Why is VoWiFi taking off?

Solves a real problem
10-20% of subscribers have no to poor voice coverage at home

Subscribers are ready
Majority of subscribers now have smartphones, and most already connect to home Wi-Fi

Handset ecosystem in place

Significant operator momentum

Proprietary & Confidential
Plus, VoWiFi has a proven business case

**Improve Coverage: Lower Subscriber Churn**

“Poor home coverage is a leading cause of subscriber churn. With Wi-Fi Calling, T-Mobile has seen a significant reduction in churn due to coverage. So much so over the last 5 years that we have continued to invest heavily in Wi-Fi Calling.”

Josh Lonn - Senior Director, Communication Services
T-Mobile

**Increase Capacity: Lower CapEx**

Wi-Fi Calling can increase Wi-Fi attachment rates, thereby increasing macro data offload

**Add Differentiation: Acquisition**

Wi-Fi Calling provides significant differentiation though the ability to bypass high cost international voice and text roaming fees
Plus, VoWiFi has a proven business case

And for rural and regional operators, reduced in country roaming charges

Roaming Partner

Out of coverage areas
And, VoWiFi is logical first step on path to VoLTE, RCS and more

Same 4G Core for VoWiFi, VoLTE, RCS and other new IP-based services
Key VoWiFi deployment considerations

How to enable VoWiFi on installed base, BYOD and new phones

The time and cost to deploy a new 4G core capable of delivering 2G/3G feature parity

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The time and cost to deploy a new 4G core capable of delivering 2G/3G feature parity

New 4G Service Core
EPC, IMS/HSS, TAS, IP-SM-GW, SCC AS, MRF,

Current 2G/3G Service Core
MSCs, HLR, G-MSC, SMS-C, IN,...
VoWiFi handset considerations

VoWiFi for iPhone
- Native feature in iOS 8
- Works on iPhone 5C, 5S and above
- Apple Partner operators can request Apple to activate the feature via new carrier bundle
- Can enable installed base and new handsets

VoWiFi for Android Phones
- Native support coming from some OEMs
- Taqua has downloadable app that provides native Wi-Fi Calling experience for...
  - New handsets without native support
  - Installed base of handsets
  - Handset not purchased through the operator
VoWiFi core network options

Procure and deploy a new 4G core network from a proven supplier

Use a hosted 4G core network from a proven service provider
Taqua Virtual Mobile Core (VMC) for VoWiFi

Standard VoWiFi Clients

IMS or Pre-IMS Networks

Virtualized Network Function

2G/3G Interworking enabling service parity and rapid deployment

Handover to Cellular

Current 2G/3G Service Core
MSCs, HLR, G-MSC, SMS-C, IN,...
Subscribers are already using WiFi

71% of all mobile communication flows over WiFi*

80% of Smartphone users supplement coverage with WiFi**

87% of U.S. Smartphones connect to WiFi at home and work***

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*Wi-Fi Alliance  **Cisco  ***Telecompetitor.com

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Source: ACG, Ovum, Cisco VNI Mobile, 2015
In T-Mobile's 2015 Super Bowl ad, called "One Upped," Chelsea Handler and Sarah Silverman exchange escalating boasts using the carrier's Wi-Fi feature. T-Mobile introduced Wi-Fi calling in September, part of the seventh wave of its "Uncarrier" initiatives. Apple lauded the carrier's feature when launching the new iPhones.

Cablevision introduces Freewheel true Wi-Fi-only mobile service.

**Goodbye data limits. Hello Generation WiFi.**
VoWiFi is offered as a part of Interop’s CorePlusX℠ suite

+s (pluses) of using CorePlusX℠ VoWiFi

- Offer WiFi calling to subscribers faster
- Complement network coverage with reduced CAPEX
- Reduce support costs
- Seamless transition from WiFi to Cellular
- Reduce roaming costs
- Ensure high quality of experience for subscribers
- Extend advanced IP services at minimal CAPEX
- Expertise combined with CorePlusX℠ architecture provides a telco-grade solution that minimizes OPEX and complexity
CorePlusX℠ VoWiFi is delivered from the private, secure Interop Cloud™. Operators can capitalize on the market demand and momentum by quickly offering WiFi calling to subscribers with Interop Technologies’ fully managed VoWiFi offering.
Functionality Overview
In Summary: VoWiFi – Why Now, Why From The Cloud
VoWiFi - Why Now & Why From the Cloud:

- VoWiFi has moved from novelty to necessity
- Capitalize on market momentum
- Quickly meet subscriber demand
- Real operator momentum
- Complement network coverage with reduced CAPEX
- Reduce roaming charges
- Scalable solution with flexible deployment options
- Fully managed telco-grade solution that minimizes complexity
Thank you for attending

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