

## Mobile VoIP Solution for Cellular Network Offload

**Maintain customer loyalty while reducing the burden on cellular data networks**

### Executive Summary

Cellular service providers are looking at Wi-Fi as a solution for offloading traffic from their cellular networks. AudioCodes VMAS Mobile VoIP solution allows cellular subscribers to continue to benefit from the cellular network using private and public Wi-Fi connections. By enabling subscribers to use their cell phone or portable devices (laptops or tablets) even when connected to a Wi-Fi network, VMAS helps service providers prevent customer churn while, at the same time, reducing the load on their data networks.

### Background – The Cellular Offload Dilemma

The growth of mobile data traffic has been explosive in recent years, driven, in particular, by the increased popularity of smartphone devices. All over the world, cellular operators are struggling to cope with the rapid increase of traffic on their data networks. As cellular networks become overloaded, the quality of service available to customers is reduced, leading to customer dissatisfaction and rising churn rates.

This challenge, along with the additional demand for providing service to locations where there is no or poor cellular coverage, is being addressed with a number of solutions. The most common of these are the deployment of femtocells and the use of Wi-Fi.

### Selecting an Offload Solution - Wi-Fi vs. Femtocell

Femtocells are small cellular base stations, designed for deployment within private homes or businesses. They typically support 2-4 phones in a residential environment and up to 16 phones in a business setting. Among the benefits of femtocell deployments for end users are better reception, lower battery consumption and improved voice quality.

While femtocells represent a pure cellular solution to the problem of cellular offloading, the use of Wi-Fi is becoming increasingly attractive for a number of reasons. Wi-Fi technology is not restricted by the use of licensed spectrum wavelengths. While femtocells are only deployed in private, indoor environments, Wi-Fi hotspots can be implemented in public or private networks and both indoors and outdoors. Furthermore, the ubiquitous nature of Wi-Fi today means that operators can use existing residential and business networks with no need for subscribers to invest in new equipment.



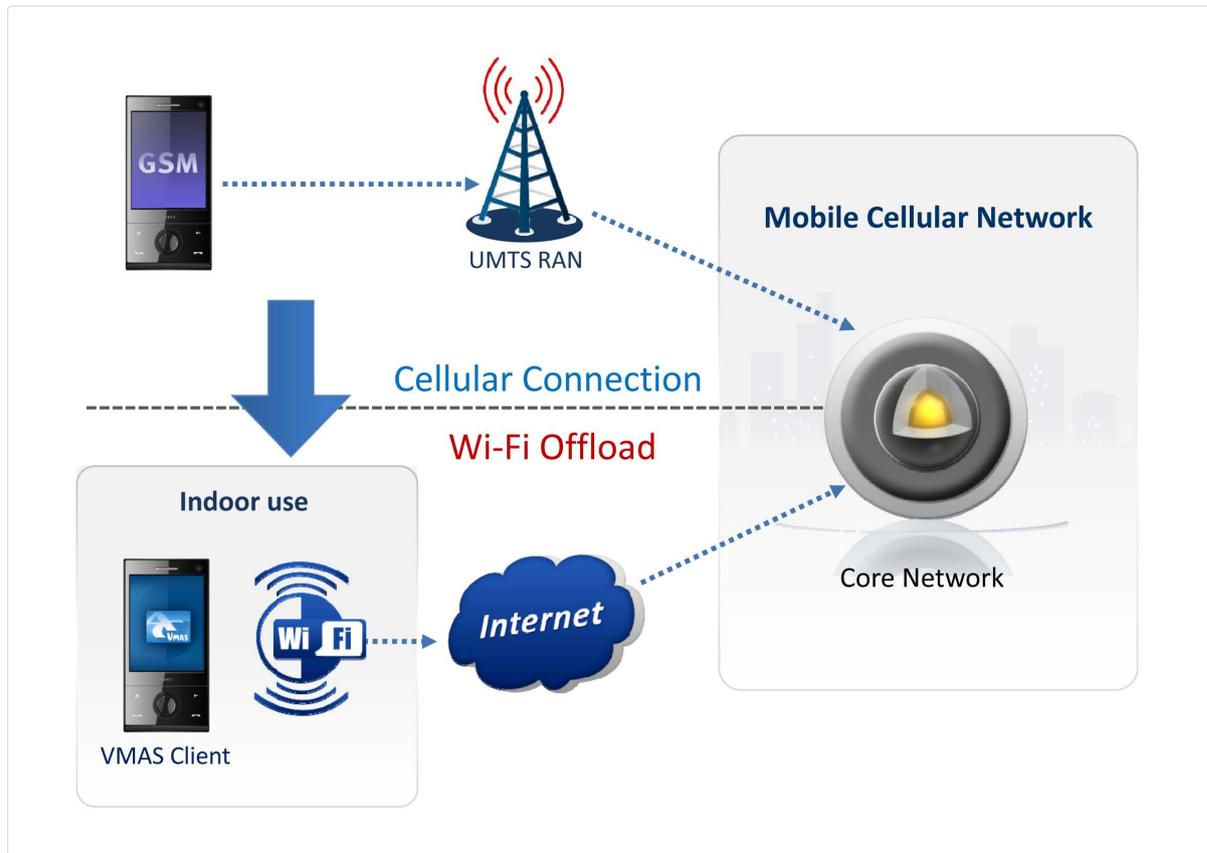
Wi-Fi as a solution for cellular offload is becoming even more attractive with the rapid rise in popularity of the smartphone. Wi-Fi hotspots, which were originally designed for use by laptop users, are now used extensively by smartphone users for their data traffic. Major cellular operators are aware of this trend and are beginning to roll out extensive Wi-Fi hotspots deployments in public areas. AT&T, for example, have begun a massive deployment of Wi-Fi hotspots in New York City in major public areas, such as Times Square, branches of Starbucks and McDonald's, and twenty of the city's parks.

## AudioCodes VMAS Solution for Wi-Fi Cellular Offload

One way that both service providers and their subscribers can benefit from Wi-Fi connectivity is through the deployment of mobile VoIP services. Using private or public Wi-Fi infrastructure, subscribers can connect to the cellular operator's network, benefitting from the inherent quality of service features that Wi-Fi networks have built-in to them to support real-time media applications.

AudioCodes VMAS is a mobile VoIP Solution from AudioCodes comprising the Client Management System (CMS) and a variety of mobile soft clients for leading mobile operating systems and smartphones. VMAS is currently available for such leading smartphones as iPhone/iPod touch, iPad, Android OS and others.

The VMAS client delivers high quality Voice over IP calls via existing mobile phones (using Wi-Fi and cellular data). This enhances standard mobile networks by taking advantage of widespread data connectivity available today via Wi-Fi hotspots and cellular data networks.



## **VMAS – Benefits for Service Providers and Subscribers**

VMAS allows cellular subscribers to initiate and receive voice calls and text messages (SMS) over a Wi-Fi connection, via their current mobile handsets at highly cost-effective rates. Cellular operators and MVNOs benefit from the solution in several ways:

- By using Wi-Fi connections, VMAS enables operators to offload voice calls from the already congested cellular network
- By offering attractive rates, operators can encourage subscribers to use their cellphone instead of their regular landline for calling from home
- Operators can attract subscribers away from free, over-the-top alternative VoIP services by offering VMAS calls at reduced rates
- Using the VMAS PC and Web clients, subscribers can make calls over the cellular operator's network with exactly the same user experience

**There are many ways in which subscribers can benefit from the VMAS solution:**

- Subscribers are able to make and receive calls to their cellphone, even in areas with poor cellular reception
- The user experience is the same as when making regular cellular calls, including use of the cellphone's native address book
- When using VMAS, subscribers are accessible via their regular cell number. There is no need to create and remember new IDs (as with other VoIP services, like Skype and Google Talk)

## **VMAS Mobile VoIP Solution Highlights**

The AudioCodes VMAS solution has been designed to meet the wide-ranging demands of the service provider environment. VMAS enables efficient distribution of the clients to the relevant mobile handsets. The CMS supports customized features, such as remote configuration and setup for various business models, meeting the needs of service providers.

VMAS is widely interoperable with most major softswitches and IP Centrex solutions, enabling open network architectures that maximize value and reduce costs. The VMAS user interfaces are fully brandable according to the service provider's requirements. VMAS CMS software was developed in-house, is stand-alone and independent. Therefore, it cannot be disabled by the devices themselves. Support for all major operating systems allows the service provider to distribute the clients to most smartphone customers, thereby exposing the solution to a larger number of customers.

## About AudioCodes

AudioCodes Ltd. (NasdaqGS: AUDC) designs, develops and sells advanced Voice over IP (VoIP) and converged VoIP and Data networking products and applications to Service Providers and Enterprises. AudioCodes is a VoIP technology market leader focused on converged VoIP & data communications and its products are deployed globally in Broadband, Mobile, Enterprise networks and Cable. The company provides a range of innovative, cost-effective products including Media Gateways, Multi-Service Business Gateways, Session Border Controllers (SBC), Residential Gateways, IP Phones, Media Servers and Value Added Applications. AudioCodes' underlying technology, VoIPerfectHD™, relies on AudioCodes' leadership in DSP, voice coding and voice processing technologies. AudioCodes High Definition (HD) VoIP technologies and products provide enhanced intelligibility and a better end user communication experience in Voice communications.

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