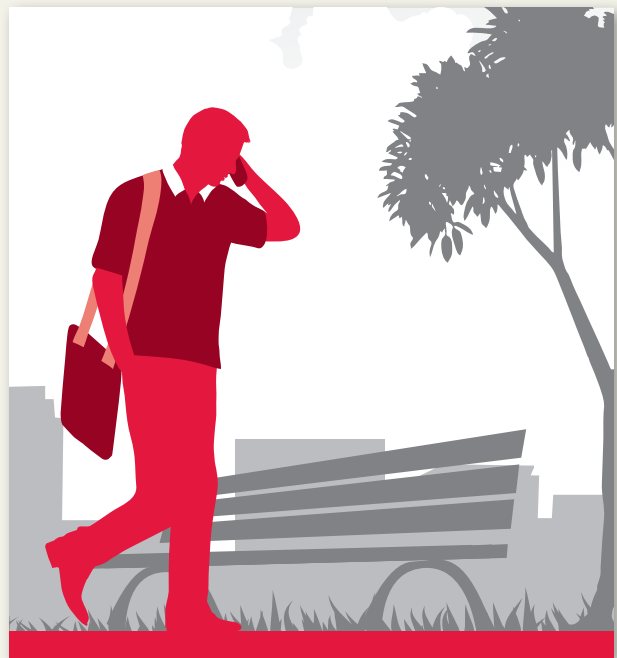


**ROGERS WHITE PAPER:**

# **WI-FI CALLING FOR BUSINESS**

An Overview for Small Businesses



## TABLE OF CONTENTS

---

Introduction	3
What Is Wi-Fi Calling and How Does It Work?	4
What Are the Business Benefits?	6
Is Wi-Fi Calling Right for You?	7
Are You Ready?	8
Next Steps	8
About Rogers Wi-Fi Calling for Business	9
Plans for Business	10
About Rogers	11

## INTRODUCTION

---

Smartphones are becoming ubiquitous in business. Once the device that kept employees connected when out of the office, the smartphone is becoming the primary communications tool for vast numbers of mobile workers no matter where they are—including the workplace. In fact, as communications converge around the smartphone, many small businesses are actually disconnecting their landline voice service. Even businesses that wouldn't consider doing away with their landlines are recognizing that their employees will use either company or personal smartphones at work. It's a reality of doing business today.

If you run a small business, or you're responsible for its telecommunications services, you're aware that this new reality has associated costs. If you and your employees are spending more time on mobile devices, you need that time to be as cost-effective as possible. At the same time, you need to make sure that your wireless communications are reliable and seamless, so that you don't let your customers or suppliers down with dropped calls and other interruptions. You need to look at the enabling services and technologies for your wireless communications to make sure they're delivering the best possible experience whether your employees are in the office or on the move.

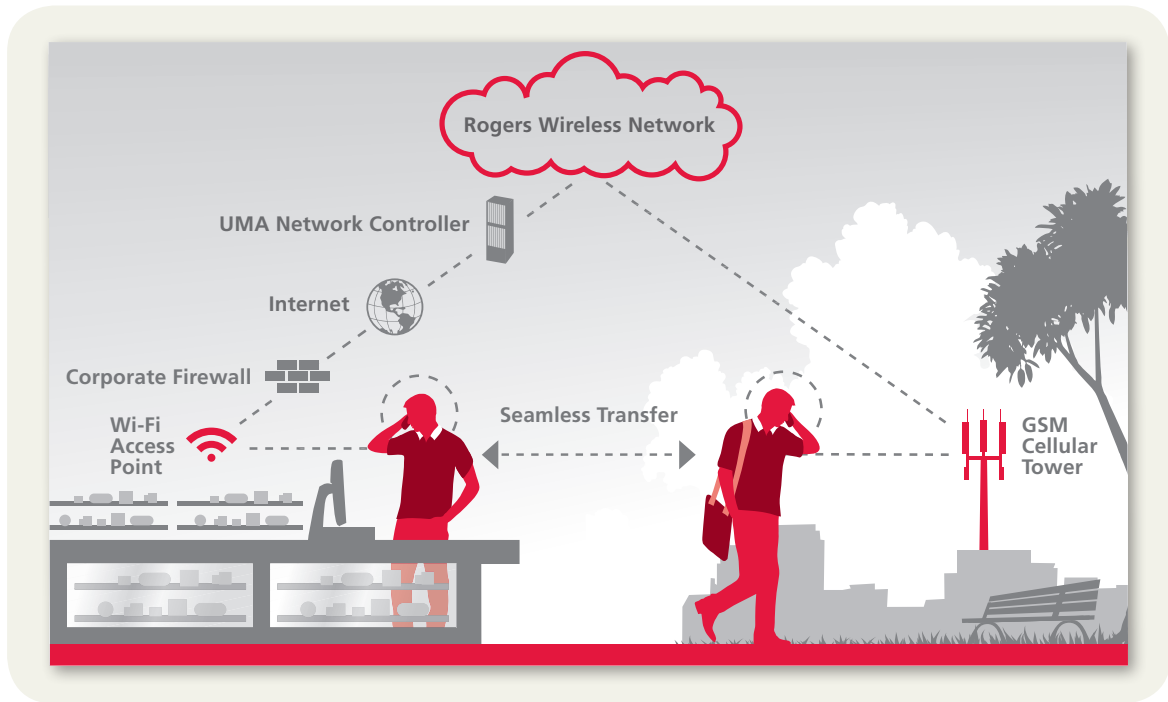
A recent innovation that can help to deliver cost-effective, reliable and seamless mobile connectivity involves carrying voice calls over Wi-Fi networks. This paper provides you with information that will help you evaluate whether this technology is right for your organization.



## WHAT IS WI-FI CALLING AND HOW DOES IT WORK?

Unlicensed Mobile Access (UMA) is a technology that enables you to make voice calls on a smartphone over a Wi-Fi network. It also hands off a call that you initiated on Wi-Fi to a GSM wireless network when you move beyond the range of your Wi-Fi signal. Similarly, if you're on a wireless call and come within range of your workplace or home access point, your call will transfer automatically to Wi-Fi.<sup>1</sup> Known familiarly as Wi-Fi calling, this technology provides enhanced coverage and seamless delivery of voice, data and messaging (such as SMS and MMS). It can also lower your telephony costs.

**FIGURE 1: How Wi-Fi Calling Works**



<sup>1</sup> UMA-enabled BlackBerry® devices support a seamless transfer between a Wi-Fi and a GSM cellular network without user intervention. For solutions involving other handsets and other mobile operating systems, the handover experience may vary. Speak with a Rogers Business Specialist for more information.

The key requirements for Wi-Fi calling are:

- **UMA-enabled dual mode handsets** (with GSM and Wi-Fi radios). A broad array of dual mode handsets from the major device manufacturers, including most current BlackBerry® device models, support UMA.
- **A broadband Wi-Fi access point or network capable of handling voice service** (most recent models can). Some configuration of your Wi-Fi may be required to optimally support voice calling.
- **A Wi-Fi calling plan.** Providers can offer different plan options to meet the varying needs of organizations and individuals, including an access-only plan, a plan for unlimited calling to your local area code, and one for unlimited national calling.

To understand the technology behind Wi-Fi calling, think of it as creating an IP extension of your wireless service provider's network. Essentially, the Internet becomes a transport medium for voice calls. When your smartphone encounters a Wi-Fi access point that it recognizes, it connects with the access point, then establishes a session with a "gateway", which verifies that proper authentication and security protocols have been exchanged. Once this has occurred, your call is transferred seamlessly and securely between the Wi-Fi and wireless networks. The handover process is completely transparent, just as when you're using your smartphone on the go and your call passes from one wireless network cell to another.

Before a call is transferred to Wi-Fi, the "intelligent" carrier network automatically detects whether there is sufficient internet connectivity, which helps prevent dropped calls.

## WHAT ARE THE BUSINESS BENEFITS?

Whether you're concerned about your telephony spend or coverage issues within your workplace, Wi-Fi calling will deliver a number of key benefits.

**Cost Predictability or Cost Savings.** If you subscribe to a Wi-Fi calling service that provides unlimited local or national calling, the calls you make on Wi-Fi don't count against your total monthly minutes. Even when you move beyond the range of your Wi-Fi network, your call will continue to be zero rated.<sup>2</sup> Using fewer minutes can mean fewer overage fees, and it also allows you to right size your plan to suit your actual usage.

**Enhanced Coverage.** If the wireless signal at your workplace is weak or inconsistent, Wi-Fi calling can reduce dropped calls and keep you connected to your customers and the other people who matter to your business. You'll need a commercial-grade Wi-Fi router or network that is properly configured and optimized for Voice over IP (VoIP) calls. A Wi-Fi system provider can assess your network and ensure that it's optimized for voice.

If your business is located at the edge of your carrier's network and does not normally receive a cellular signal, you can extend the wireless network within your workplace and, if adjacent to the outdoor network, roam seamlessly.

**Seamless Connectivity.** Do you find yourself switching between your landline and your smartphone when you're in and out of your workplace? Wi-Fi calling keeps you connected as you go about your business, transferring your call back and forth seamlessly between your carrier's wireless network and Wi-Fi networks saved on your smartphone, without any thought or effort on your part. You can stay focused on your business and not have to worry about using multiple phones, forwarding your calls or providing your customers with multiple numbers.

**Ease of Use and Deployment.** If your business has a Wi-Fi network and UMA-enabled smartphones, deploying Wi-Fi calling can be fast and easy. For many handsets, the functionality is already embedded and requires no installation.<sup>3</sup> Configuring a smartphone to connect with and remember access points is a quick process using a connections manager on the device. Beyond the initial set up, Wi-Fi calling requires minimal learning and few or no changes in behaviour for an employee already using a smartphone.

<sup>2</sup> Calls that are initiated on the wireless network continue to incur minute charges after they are transfer to Wi-Fi calling.

<sup>3</sup> Most current BlackBerry® devices are enabled with UMA technology. For more information, visit [http://ca.blackberry.com/ataglance/networks/#tab\\_tab\\_umagan](http://ca.blackberry.com/ataglance/networks/#tab_tab_umagan) . For other smartphone platforms, additional software may be required. Speak with a Rogers Business Specialist for more information.

## IS WI-FI CALLING RIGHT FOR YOU?

If you're interested in Wi-Fi calling but aren't sure if it's right for your business, ask yourself if one or more of the statements applies to you or other employees in your company. If the answer to any is yes, it's probably worth taking a closer look.

- You frequently make and receive calls on your smartphone while at your workplace.
- You worry about exceeding your monthly voice minutes and incurring overage charges.
- You sometimes drop calls at the workplace due to a weak or interrupted signal.
- You've made an investment in a Wi-Fi network and would like to get more value from it.
- You're frequently on the go and would like to talk seamlessly as you come and go from your workplace.
- You're considering getting rid of your landline and having just one number where your customers and suppliers can reach you.

## ARE YOU READY?

Still interested? Deploying Wi-Fi calling is simple, but there are certain requirements before you can get started. Here are some questions to ask yourself.

- **Are UMA smartphones deployed in my business?** Most BlackBerry devices are UMA-enabled and support Wi-Fi calling. If your mobile operating system needs upgrading, there are several easy ways to do that. We recommend that you speak with your wireless carrier or account representative for more information.
- **Will my Wi-Fi network support voice calls?** Unless you're a home-based business with one or a few users, you should have a commercial grade Wi-Fi access point or network. Otherwise, the quality of your calls could suffer. If you're not sure whether your system is voice enabled, speak with your Wi-Fi provider.
- **Is my Wi-Fi coverage strong throughout my workplace?** Depending on the size of your business, you may need more than one Wi-Fi access point. You should also ensure that all required areas of your premises are well covered. If your workplace is more than 2,500 square feet (230 square metres) or contains obstacles to Wi-Fi signals such as concrete walls and metal doors, ask your Wi-Fi network provider to conduct an on-site assessment.
- **Is my Internet connection fast enough?** As a rule of thumb, you should have approximately 100 kbps of upload speed per user. If you plan to have more than five users making simultaneous calls over Wi-Fi, we strongly recommend that you ask your Wi-Fi network provider to do a site inspection.

## NEXT STEPS

Clearly Wi-Fi calling can offer some compelling business benefits to organizations looking to control costs, improve coverage and stay seamlessly connected. If after reading this you're interested in learning more, here are some next steps:

- Speak with a Rogers Business Specialist about your organization's wireless needs.
- If you have deployed a Wi-Fi network at your workplace, speak with your Wi-Fi provider about your readiness for a UMA deployment.



## ABOUT ROGERS WI-FI CALLING FOR BUSINESS

Rogers is the only wireless service provider in Canada to offer UMA-based Wi-Fi calling, It's one of the many advantages of a network founded on GSM—the global standard. Wireless networks built on other technologies, such as CDMA, cannot deliver this experience.

While other service providers can enable voice calling on a Wi-Fi network, there are important differences:

ROGERS WI-FI CALLING FOR BUSINESS	OTHER WI-FI CALLING PRODUCTS
Calls initiated on Wi-Fi automatically hand off to the Rogers wireless network—and vice versa	No network hand off. Calls initiated on Wi-Fi drop off when the caller moves beyond Wi-Fi range
Calls initiated on Wi-Fi are zero rated even after the call transitions to the wireless network	This feature is not supported. Calls on the wireless network incur charges
Supports SMS and MMS as well as voice and data	SMS and MMS are not supported
No third-party software is required	Third-party software must be installed on handsets
Retain one phone number	Multiple numbers or special IDs are required to make Wi-Fi calls

## PLANS FOR BUSINESS

Rogers offers three Wi-Fi Calling plans to meet the varying needs of organizations and individual employees:

ROGERS PLANS	PERFECT FOR
ACCESS ONLY	▶ Organizations seeking enhanced voice coverage and redundancy
UNLIMITED LOCAL CALLING	▶ Organizations with local customers and suppliers seeking cost certainty in their voice communications
UNLIMITED CANADA-WIDE CALLING	▶ Organizations with national customers and suppliers seeking cost certainty in their voice communications

For more information about Rogers Wi-Fi Calling for Business, speak with a Rogers Business Specialist at 1-800-850-4217 or visit your local Rogers Authorized Dealer.

You can also learn more at [www.rogers.com/wifibusiness](http://www.rogers.com/wifibusiness).

## ABOUT ROGERS

Rogers Communications connects 1.5 million subscribers in small, medium and large businesses and the public sector to their customers, suppliers, partners and employees with reliable wireless voice and data services. As well, approximately 115,000 subscribers rely on Rogers for affordable and reliable small business Internet, telephone, and TV services that help improve their customer service and bottom line. Rogers Communications wireless voice and data services are built on Rogers proven HSPA+ network, the first in Canada and the only one based on GSM, the global standard.

Rogers phones and devices are world ready, allowing employees to stay connected wherever their business takes them. Rocket™ internet services enable businesses to get easy internet access where and when they need it and to remain productive and responsive. Rogers also provides custom wireless solutions for mobile workers, fleet and asset management, business continuity and machine-to-machine communication. All Rogers business services are backed by 24/7 technical support.

For more information, please visit [www.rogers.com/business](http://www.rogers.com/business).

™Rogers, Rocket & Mobius Design plus and related brands marks and logos are trade-marks of or used under license from Rogers Communications Inc. or an affiliate. ©BlackBerry, RIM and related names and logos are the property of Research In Motion Limited and are registered and/or used in the U.S. and countries around the world, used under license from Research In Motion Limited. All other brand names are trade-marks of their respective owners.  
© 2011 Rogers Communications

