



Seamless Mobility Integration
**WINDOWS PHONE 8
PLATFORM**



WINDOWS PHONE 8 PLATFORM: THE NATURAL EXTENSION OF YOUR EXISTING INFRASTRUCTURE

When choosing a mobility platform, businesses need to consider the big picture as well as the details. Assessing the platform's capabilities and features is important, but equally critical is the question of integration. A platform that has all the latest features but isn't designed to integrate smoothly into your existing infrastructure could end up costing you extra time and money. Now you can get both the advanced performance you want and the complete integration you need with Windows® Phone 8.



Windows Phone 8 Is Designed with Seamless Integration in Mind.

Many companies—from sole proprietors who can't afford to be distracted by technology to large enterprises with complex IT needs and policies—already use some level of Windows-based infrastructure and Microsoft® applications and programs to empower their businesses. No other mobile platform integrates as simply and fully into these existing systems as Windows Phone 8. It greatly reduces the complexity of implementing a mobility strategy, and also smoothly extends the capabilities of your existing Microsoft tools to employees' mobile devices.

In addition to a platform that integrates and performs the ways your business demands, your mobility strategy also depends on a reliable wireless provider. As of 2013, Verizon Wireless has invested more than \$80 billion since its inception in 2000 to improve the performance and coverage of its nationwide network. Verizon has also partnered with technology leaders to deliver innovative products and services that help businesses like yours achieve their long- and short-term mobility goals.

WINDOWS PHONE 8 INTEGRATION

Windows Phone 8 was designed with the same security and control features you know and trust in your existing Microsoft infrastructure. It provides seamless access to information across devices, empowering employees with uninterrupted productivity in or out of the office.



Security

Windows Phone 8 mobile devices have security features that are based on the NT kernel, like the Windows PC operating systems users already understand and trust.



Control

Windows Phone 8 allows you to develop and deploy apps via familiar Microsoft tools, and provides robust support for Microsoft Exchange ActiveSync® policies and capabilities.



Access

Windows Phone 8 delivers a consistent experience across devices and form factors, whether mobile or in the office, which eases the learning curve and reduces the need for support.



Productivity

Windows Phone 8 empowers users to work on the go, with well-known productivity tools built right in, such as Microsoft Office programs and SharePoint®, and full integration with Microsoft Exchange email, calendars and contacts.

SECURITY: LOCK DOWN CONFIDENTIAL DATA.

Windows Phone 8 recognizes the critical need for reliable security, and that's why the platform uses a "defense-in-depth" approach that addresses security in a variety of ways—to help prevent data leakage, keep unauthorized users from accessing information, block malicious apps, help businesses comply with industry and corporate security regulations and more. Its security features easily integrate with familiar protocols and processes.



Mobile device security has become one of the most important concerns for businesses that want a mobile workforce.

Consider the following statistics:

- + Fewer than 10% of organizations are “fully aware” of the devices accessing their network.¹
- + Fifty-five percent of employees admit they've sent work email or documents to their personal email accounts on their phones.²
- + People are 15 times more likely to lose a mobile phone than a laptop, making loss the biggest threat to mobile users.³
- + Fifty percent of companies have experienced a data breach due to unsecure devices.⁴

With data breaches on the rise, it's no wonder that experts say spending on mobile security will continue to grow at 44% annually, from almost \$760 million in 2011 to more than \$3 billion by 2015.⁵

Windows Phone 8 delivers security features powerful enough for even the most complex enterprises. BitLocker-based full-device encryption helps protect your sensitive data, and the trusted boot process allows only validated software components to execute. Application sandboxing keeps malicious apps from accessing data or preying on other apps. And Windows Phone 8 is the only platform with native support for information rights management (IRM), which helps protect information from unauthorized use.

1 SANS Annual Mobile Security Survey, April 2012.

2 "Risky Business: Exploring Prosumer Smartphone Habits," Motorola Mobility infographic, 2011.

3 "McAfee Partners with 'SFR Sécurité Mobile' to Safeguard Personal Data for Android, BlackBerry and Symbian OS Users," McAfee, Inc., February 6, 2011.

4 Ponemon and Websense survey of 4,640 companies, 2012.

5 "Mobile security investment to climb 44% each year through 2015," Canalis, October 2011. <http://www.canalis.com/newsroom/mobile-security-investment-climb-44-each-year-through-2015#sthash.1GABYNbF.dpuf>



TECH CORNER

Secure Boot, Code Signing and Device Wipe in Action

Ann has a Windows Phone 8 smartphone with a range of apps that help her manage her food delivery service. When Ann realizes that she has lost her phone during the day's many deliveries, she can stay confident that her personal information, contacts and other data will remain protected. Secure Boot and Code Signing prevent users from installing malware or other software that would compromise the device's core components. And with the ability to remotely wipe her phone's data, Ann can ensure that proprietary and confidential information stays out of the wrong hands, even if the device is never recovered.

Secure Boot and Code Signing

Secure Boot technology validates firmware images on devices before they are allowed to load the operating system. Under this approach, all boot components have digital signatures that are cryptographically validated from the pre-Unified Extensible Firmware Interface (UEFI) bootloaders to the UEFI environment. This helps ensure that only authorized code can execute to initialize the device and load the Windows Phone 8 operating system—thereby creating a vital link in a chain of trust that extends throughout the system's firmware and hardware.

In addition, all code in the Windows Phone 8 operating system is signed by Microsoft, including OEM drivers and applications. Apps that are added after manufacturing must also be properly signed to execute.

Together, Secure Boot and Code Signing ensure that the core device components have not been compromised.

Application Platform Security

The Windows Phone 8 security model uses a chambered concept, with each chamber providing security and isolation boundaries that keep processes separated from each other. Application developers can design apps for each chamber and specify which OS capabilities are called by the apps in that chamber. Capabilities include any resource that affects factors like privacy, security or cost, such as networking, location data, camera, microphone or the device's other sensors.

All app chambers receive a basic set of permissions by default, including isolated storage access. Application developers can expand that set of permissions to include additional capabilities needed by the app to run. For further protection, permissions can only be expanded during app installation, not at run time. Every app runs in its own isolated chamber, and apps can't access memory used or data stored by other applications.

The chamber model is beneficial for several reasons:

Reduced attack surface

Because apps are sequestered from each other, each app gets the capabilities it needs to perform, and nothing more. More capabilities mean more ways to breach security, so limiting apps to only what they need helps lower risk.

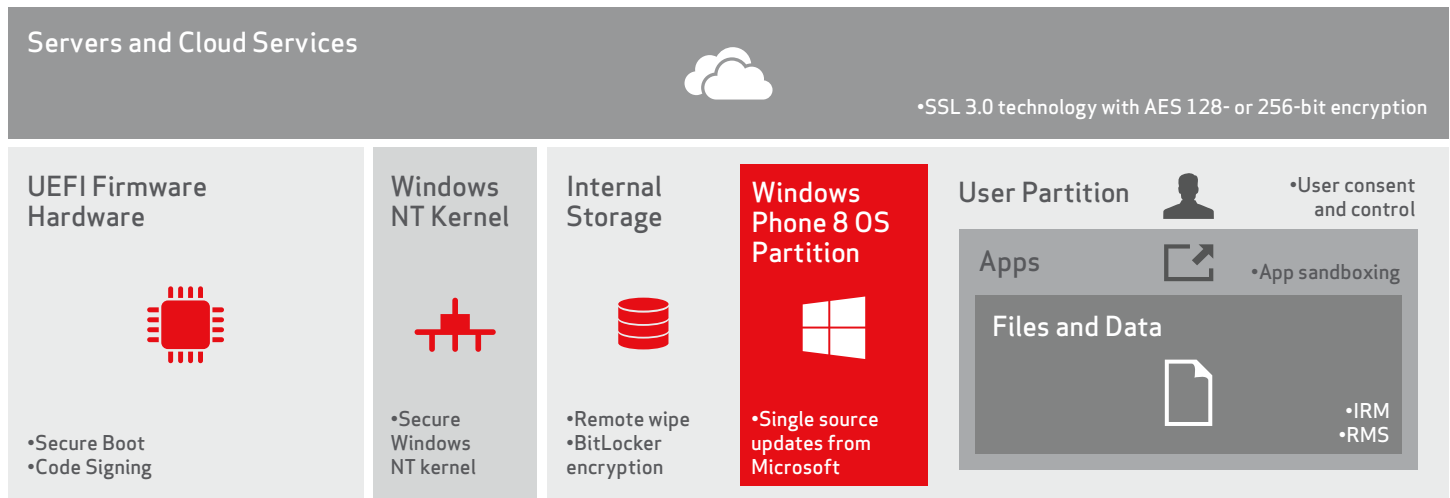
User consent and control

Because each app states its capabilities on the app details page in the Windows Phone Store, and because clicking to download an app demonstrates a user's explicit consent to allow the app's capabilities, users have control to choose whether they consent or not to specific activities, such as location tracking.

Isolation

Chambers allow apps to communicate with each other only via the new contract technology from Windows Phone 8. Apps are isolated from each other and cannot access memory used or data stored by other applications, including the keyboard cache.

WINDOWS PHONE 8 LAYERS OF SECURITY



Data Protection

Protecting data is paramount in every business. Windows Phone 8 makes it easier with multilayered security features that form multiple barriers to deter unauthorized users. Plus, the Verizon Wireless network has powerful security features that help ensure your data is always protected.

Device Access and Security Policies

An organization can control access to Windows Phone 8 devices with password or PIN restrictions set by users, as well as IT-defined policies for password length and complexity. The devices also come with built-in device management capabilities that IT administrators can use to set policies.

Both users and IT administrators can initiate a remote wipe when a Windows Phone 8 device is lost or stolen. Other access security features let users locate lost phones, see a map of the device location and make the phone ring remotely.

Full Device Encryption

Windows Phone 8 protects everything from documents to passwords through BitLocker encryption technology. This keeps unauthorized users from accessing the device's internal storage, operating system and data files.

Removable Storage

While Windows Phone 8 supports removable storage, files copied to these microSD cards are not encrypted. That's why the Windows Phone 8 platform only lets users store media files on the cards. IT administrators can further limit the use of microSD cards by setting specific policies or by disabling the card altogether via a third-party device management solution.

Data Leak Prevention

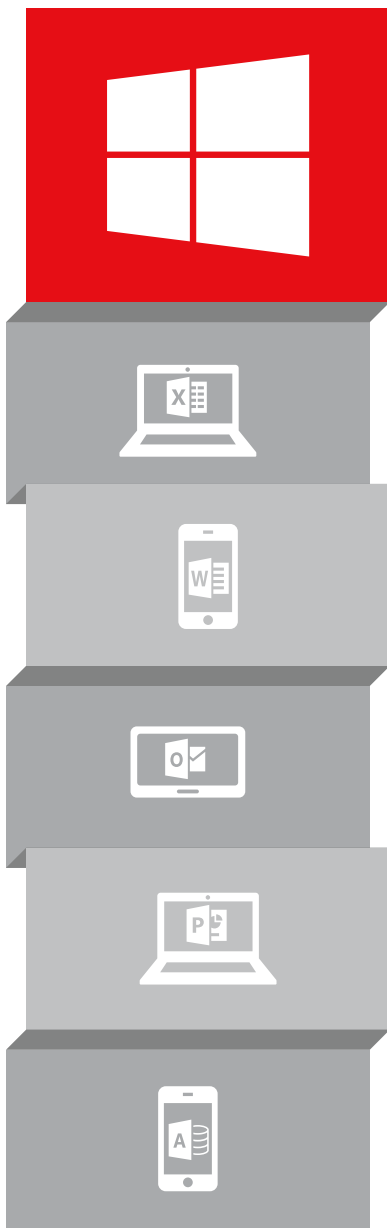
Windows Phone 8 provides a cost-effective IRM platform to help prevent intellectual property leaks. IRM allows content owners to dictate where, when and how others can use the content. This platform, Windows Rights Management Services (RMS), empowers IT administrators to assign rights to content, including email messages and documents stored on SharePoint and other locations. Windows Phone 8 is the only platform with full support for Windows Rights Management Services.

Secured Access

Windows Phone 8 is designed to take full advantage of cloud-based services, and to do so securely. Data synchronization between Windows Phone 8 devices and most cloud services or on-premises servers uses a Secure Sockets Layer (SSL) connection. All network traffic for critical Windows Phone 8 business apps, such as Exchange Server and SharePoint, is encrypted using AES encryption.

DEVICE AND APP CONTROL: DEVELOPMENT AND DEPLOYMENT MADE EASY

Because of its simple integration, Windows Phone 8 allows you to develop, deploy and manage mobile apps with ease, using tools you already know, like Microsoft Visual Basic. That means you can package, sign and distribute mobile line-of-business (LOB) apps while maintaining end-to-end control, including publishing apps via private portals or their own hub. The platform also enables device enrollment and management, software distribution, configuration management and reporting—the same control features you expect from your existing Microsoft infrastructure.



Today, businesses need a better way to manage and control all company devices. And because employees often depend on custom LOB apps, businesses also need to be able to efficiently develop, deploy and manage those apps.

Running on the Verizon Wireless network, Windows Phone 8 provides the solution to the challenges of device and application management. The platform enables you to extend corporate email access to mobile devices, along with the policies that help protect that data. Windows Phone 8 also makes it easy to develop and deploy LOB apps to employee phones and maintain end-to-end control over those apps.

Exchange ActiveSync

Windows Phone 8 supports essential Microsoft Exchange ActiveSync (EAS) policies and capabilities, including:

Password requirements

You can require passwords and specify how complex they must be, how often they must be changed and whether they can be reused.

Idle timeout frequency or value

And you can specify how quickly a phone locks when it's not being used.

Device wipe.

If a device is lost, either a user or an Exchange administrator can initiate remote wipe. You may also specify the number of times a wrong password can be tried before the phone wipes and resets to factory settings.

Enterprise Device Management

For companies that need additional capabilities beyond EAS, Windows Phone 8 has built-in mobile device management (MDM) functionality that can be used with Windows Intune or third-party MDM solutions. These native capabilities include configuration management, device enrollment and management, software distribution and reporting.

Using Windows Intune or third-party MDM solutions offers advantages over an MDM approach solely based on EAS. These include one-step device enrollment and policy provisioning, as well as remote removal of data such as enrollment and apps. These MDM solutions also greatly enhance application deployment and control.

GAIN CONTROL OF APPLICATION DEPLOYMENT.

With Windows Phone 8, it's simple to deploy apps the way you want to, whether you submit them to the Windows Phone Store or create a private corporate portal.

Line-of-Business Apps

Windows Phone 8 delivers:

Enterprise LOB support

Develop, package, sign and distribute your LOB apps and maintain end-to-end control.

Private software distribution

Publish your organization's app catalog and distribute your apps securely with Windows Intune, which you can use to install, update and uninstall LOB apps.

Custom hubs

A custom company hub is a one-stop shop for all the business apps and information employees need to be productive on the go. And if a user leaves the company or a device is lost, the company hub can be removed from the device remotely.

LOB apps specific to your business needs typically require a higher level of security and policies to restrict access to authorized users only. They also need tight control over periodic updates. Now Windows Phone 8 gives developers the tools they need to create Windows Store LOB apps on Windows Runtime. This platform offers features like improved mobility, enhanced performance support for touch capabilities, stronger security and easy updating and deployment.

Windows App Store

In addition to strong support for LOB apps and the apps built into the device, Windows Phone 8 also comes with an extensive list of applications that can help your employees work more productively and efficiently. The Windows App Store now has more than 165,000 apps in dozens of searchable categories. The store also organizes apps by most popular, featured and more.



ACCESS: A CONSISTENT EXPERIENCE ACROSS DEVICES

No other mobile platform integrates as rapidly and cost-effectively with existing Windows-based IT infrastructures. Windows Phone 8 supports Exchange Server and EAS for rich, secure email experiences, and also works smoothly with SharePoint Server and Lync Server to provide easy access to communication and collaboration services—whether they're hosted on-premises or in the cloud on Office 365.



The Same Windows Experience on All Devices

The Windows Phone 8 OS, running on devices over the Verizon Wireless network, provides a consistent experience across devices and form factors. This eases the learning curve for users and reduces the need for IT support.

With SkyDrive cloud services built in, Windows Phone 8 keeps all of your documents and files within reach on your phone, tablet, laptop or desktop. That means employees can work on documents when and where they need to, and never worry about version control or having the latest changes at their fingertips.

Easy Integration Lowers Your Cost of Ownership.

Because Windows Phone 8 devices integrate seamlessly into your existing Microsoft infrastructure, you get a faster return on investment and lower support costs. There's no need to purchase additional third-party

software to get the platform up and running, and many important capabilities are already built in, such as the IRM client, EAS, management client and comprehensive mobile versions of Microsoft Office programs—all of which help greatly reduce your total cost of ownership.

Windows Phone 8 also has built-in support for a wide range of Microsoft Office servers and services, including:

- + Exchange Server, Lync Server and SharePoint
- + Cloud services such as Office 365 with Exchange Online, SharePoint Online, Lync Online and Windows Azure

For Microsoft Office 365 customers, simply enter your email address and password once to automatically register with your existing Office 365 service for email, calendar, SharePoint and Lync Online. Windows Phone 8 includes support for these systems.

PRODUCTIVITY: ENJOY UNINTERRUPTED WORKFLOW.

Windows Phone 8 seamlessly integrates mobile devices with the productivity tools most employees are already using, such as Microsoft Outlook® and Microsoft Office. With Windows Phone 8 mobile devices powered by the Verizon 4G LTE network, your employees can work confidently right where they are, whether in the office or on the go.

Communicate and Organize with Email, Calendar and Tasks.

Windows Phone 8 ties the mobile operating system to Microsoft Exchange, so employees can use Outlook email as well as the calendar and other organizational tools they're familiar with.

Easy access to these tools means they can:

- + Pin their email in-box or important email folders to the Start screen to quickly view new messages.
- + View emails by conversation, making it easier to sift through complex threads.
- + Quickly triage emails by changing views from All to Unread to Flagged to Urgent with just a swipe.
- + Combine email accounts so they display in a single in-box; a dynamic Live Tile with a counter informs users of new messages.
- + Search the company email server for messages not stored on their phones.
- + See meeting invitations and conflicts with calendar entries at a glance.
- + Manage multiple calendars in a single view, integrate to-do lists with calendars and set quick appointments.

Find What Matters Most with Live Tiles.

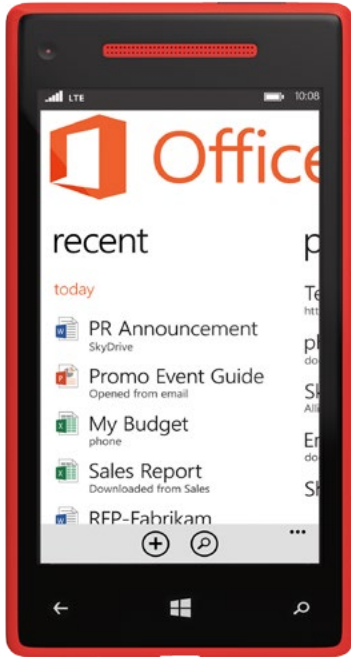
With Live Tiles, users can customize their displays to perfectly reflect the way they work, making their Windows Phone 8 devices uniquely—and efficiently—their own. They can also pin what matters most to their Start screens, including apps, contacts, Web sites, directions and more.

Live Tiles help save time by delivering data to the Start screen in real time. That means employees don't have to launch apps or navigate a Web browser. Right from the Start screen, they can use apps, check calendar appointments, stay up to date with a contact's social media posts or send a group email.



Live Tiles in Action

Mary runs a small consulting firm with eight full-time consultants who spend most of their time on the road visiting clients. Live Tiles help her stay on top of the company workflow all day, every day—with tiles on her Start screen for email, missed calls and voicemail messages, the week's calendar, latest news for the consulting industry and more.



TECH CORNER

Mobile Office in Action

Phil is a corporate attorney for a Fortune 500 manufacturing company. He spends a lot of time out of the office, meeting with company executives around the country. His staff at headquarters can prepare documents such as license agreements and contracts, and Phil can review them on his smartphone between meetings.

Mobile Office allows Phil to view and edit documents, spreadsheets and other presentations. Sync features enable his staff to immediately see his changes. If Phil decides to add a few more edits to the document later that evening, he can access the latest version of the document on his smartphone or laptop and continue making changes. His staff will see his edits when they open the document the next morning.

Work Efficiently with Built-in Live Apps.

With Windows Phone 8, your employees get immediate, built-in access to the familiar suite of Live Apps, such as Photos, Mail, Calendar and People. They also get built-in sync capabilities and automatic access to cloud services, powered by SkyDrive. The sync and cloud services are connected to users' Microsoft accounts, so they can access all of their Live Apps and data from any Web browser.

Stay in Touch with People Hub.

The Windows Phone 8 platform gives employees an easy-to-use, time-saving way to integrate their contacts from multiple sources. With People Hub, they can see updates from Exchange, LinkedIn, industry blogs and other sources, and get to their Rooms and Groups, all from one place. And they can kick off conversations with one touch, using phone, text, IM or email.

Work on Documents, Spreadsheets and Presentations with Office Mobile.

Microsoft Office mobile apps are integrated into Windows Phone 8, so employees can access Word, Excel, PowerPoint® and other Microsoft Office files right out of the box. That means they can read and edit those files without buying a third-party application or worrying about compatibility issues.

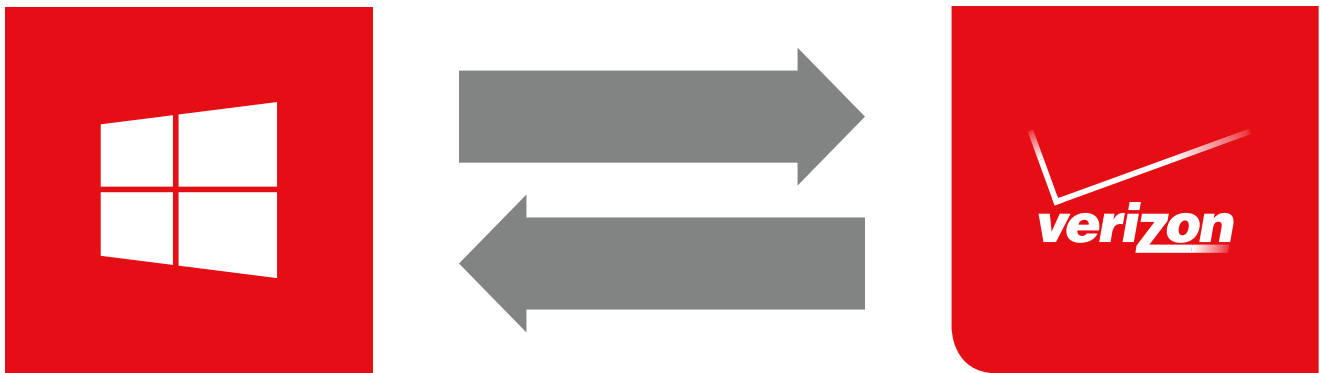
Everything is stored in the user's Office Hub, which compiles all their documents and notes in one location. It lets them:

- + Quickly access documents stored in SkyDrive, SharePoint or Office 365.
- + Keep documents and notes synchronized across their PC and phone—so they can work on a document on their PC, close it and pick up right where they left off on their phone.

Office Hub also gives employees quick access to OneNote Mobile, a convenient application with advanced features like note search, sharing, sync and multimedia capabilities.

FOR BEST RESULTS, PAIR WINDOWS PHONE 8 WITH THE RIGHT WIRELESS PROVIDER.

Choosing the right mobile-device operating system is one step in your mobility strategy, but finding the right provider is equally important. The advanced Verizon Wireless network, products and services can help your enterprise leverage mobile technology to securely and cost-effectively power productivity and boost communication and collaboration.



Together with Microsoft and other partners, Verizon is committed to enabling and empowering a range of devices, services and applications that capitalize on the powerful 4G LTE network. Verizon has made substantial and deliberate investments to bring together the assets that will help you reap the benefits of technology convergence.

No matter where your business falls in the mobility spectrum, Verizon can help, whether it's driving a new mobility initiative or making the most of your existing program. Verizon has the devices, plans, coverage, services and partners to help you accomplish your goals.

Explore Some of Our Mobility Offerings.

Mobility Professional Services

Verizon can assist with planning, design, implementation, operation and management of mobility solutions.

Mobility Management

This service helps you understand and manage your mobile inventory, spend, logistics and apps, and protect company data with secure managed connections for remote workers.

Wireless Devices

Verizon makes it easy to find the right devices, whether you need tablets, smartphones, basic phones, mobile hotspots/Verizon Jetpack® devices or USB modems.

Voice and Messaging

Voice and messaging services from Verizon give your team the quality and functionality they need to respond faster and keep your business moving. With services like messaging, Group Communications and Push to Talk, your entire team can communicate simultaneously.

Mobile Applications

Whether you need to organize your sales force, monitor vehicle usage or convert to a mobile office, Verizon can get you there with applications that help you close more deals, control costs and increase productivity.

Mobile Broadband

With Verizon Mobile Broadband, you can securely log on via VPN from more places—for instance, from inside a taxi, in an airport terminal or even at a job site at the end of a dusty road.

Global Communications

Verizon's global solutions—supported by our global partners—give you the power to support your workforce virtually anywhere business takes them.

Private Network

Verizon Private Network offers your organization its very own reliable and secure wireless extension to your IP network.

The Right Technology to Set You Apart

The intersection of cloud, mobility and security is driving a massive revolution in business and government IT. Our strategic acquisitions and investments have allowed us to build out our core competencies. Verizon has expanded its global IP networks and its 4G LTE network in the U.S., and its security practices, with Cybertrust. Most recently Verizon has expanded in the critical areas of cloud, IT and machine to machine with Terremark, Cloudswitch and nPhase.

To deliver that value, Verizon has created an innovative portfolio of platform technologies, the foundation to building solutions that help overcome today's challenges to your industry, your business and your customers.

Our broad portfolio of device vendors allows us to objectively recommend the equipment that best fits the needs of your business. Our Verizon Partner Program includes over 150 companies that help us tailor industry solutions to meet the unique needs of your business and customers. Working with world-class technology and application vendors enables us to create and deliver end-to-end business, communications and industry solutions.

Verizon leverages its investments, partners and highly experienced workforce to create complete turnkey, configurable solutions that span the globe; together, we're solving industry-specific challenges and inspiring the big ideas of tomorrow.

Verizon was the number-one-ranked telecom company in Fortune® magazine's 2012 list of the world's most admired companies, including first-place rankings for innovation and quality of products and services.



To learn more about the Windows Phone 8 platform or devices, contact your Verizon Wireless business specialist or visit verizonwireless.com