BlackBerry Enterprise Solution
and RSA SecurID

Leveraging Two-Factor Authentication to Provide Secure Access to Corporate Resources from BlackBerry Devices
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Executive Summary

BlackBerry® devices are becoming ubiquitous throughout the enterprise, as organizations improve employee connectivity and communications. The BlackBerry® Enterprise Solution—designed and manufactured by Research In Motion (RIM)—is a flexible, Information Technology (IT)-friendly solution that provides mobile users with secure wireless access to their enterprise email and critical business applications.

The BlackBerry Enterprise Solution can be augmented with two-factor authentication solutions from RSA Security. The combination of the BlackBerry Enterprise Solution and RSA Security's SecurID® two-factor authentication solution simplifies secure wireless access to enterprise applications and network resources. IT can implement two-factor authentication to allow mobile users to access applications developed and optimized for BlackBerry devices, and mobile users can benefit from the convenience of device consolidation by leveraging two-factor authentication software tokens loaded onto their BlackBerry devices.
Empowering Organizations to Stay Connected and Collaborating

Enterprises face the challenge of trying to cultivate a culture of adaptability and accountability among large and diverse workforces. Increasing the effectiveness of the enterprise can only be achieved with solutions that directly impact process and collaboration across varied functions and geographies. For companies of all sizes, wireless solutions have become more than a critical communications tool for the executive, they have become the enablers of change across the entire workforce.

The BlackBerry Enterprise Solution is the wireless solution of choice to keep mobile professionals connected to the information and communications they need. It provides enterprises with the infrastructure, security and features needed to empower lines of business with wireless access to a range of critical business applications—including Customer Relationship Management (CRM), sales force automation and field force automation.

Wireless Access to the Enterprise Via the BlackBerry Enterprise Solution

BlackBerry devices are designed to support enterprise security requirements. Many companies are realizing significant ROI and productivity gains by extending their enterprise information to mobile employees. With an increased demand for mobile content and the threat of information theft, companies have concerns about addressing security needs and requirements when evaluating wireless solutions. Security is one of the pillars of the BlackBerry Enterprise Solution.

The BlackBerry Enterprise Solution is designed so that data remains encrypted at all points between a BlackBerry device and the BlackBerry® Enterprise Server. Only the BlackBerry Enterprise Server and the BlackBerry device have access to the data sent between them. Thus, third parties— including service providers—cannot access potentially sensitive company information while it is in transit.

Users of BlackBerry devices gain secure encrypted access through the BlackBerry Enterprise Server to enterprise applications and data.
The BlackBerry Enterprise Solution leverages the same proven and secure push delivery architecture used for BlackBerry email to provide mobile users with access to data from applications and systems. It allows mobile workers to access and act on corporate information. For example:

- Users can receive customer updates and view CRM databases while on the go.
- While out of the office, users can access key intranet or Internet-based data that they rely on throughout the day when they're in the office.
- Mobile users can access inventory updates or scheduling information while in the field.
- Users can enter billing, order and account information in real time from any location.
- The enterprise can notify mobile users of important business events as they happen. For example, the enterprise can keep field workers abreast of job dispatch information in real time.

BlackBerry Enterprise Server is robust software that acts as the centralized link between wireless devices, wireless networks and enterprise applications. It integrates with enterprise messaging and collaboration systems to provide mobile users with access to email, enterprise instant messaging and personal information management tools. All data between applications and BlackBerry devices flows centrally through the server, which provides administrative control over all aspects of the solution and can centrally push updates to all wireless devices. The BlackBerry® Mobile Data System (BlackBerry MDS) is an optimized application development framework for creating, deploying and managing applications for the BlackBerry Enterprise Solution.
The Role of RSA SecurID Authentication

Organizations can further enhance the security of BlackBerry devices by integrating the BlackBerry Enterprise Solution with solutions from RSA Security. RSA Security’s products help organizations protect private information and manage the identities of people, devices and applications accessing and exchanging that information. RSA SecurID® two-factor authentication is based on something you know and something you have, providing a much more reliable level of user authentication than reusable passwords.

It is the only solution that automatically changes user passwords every 60 seconds. RSA SecurID authentication has been on the market for over 15 years—with no reported security breaches. RSA SecurID authentication tokens provide “hacker-resistant” two-factor authentication, resulting in easy-to-use and effective user identification.

Based on RSA Security’s patented time synchronization technology, authentication tokens generate a simple, one-time authentication code that changes every 60 seconds. To access resources protected by the RSA SecurID system, users simply combine their secret Personal Identification Numbers (PINs)—something they alone know—with the token codes generated by their authenticators—something they carry.

The result is a unique, one-time-use passcode that is used to positively identify—or authenticate—the user. If the code is validated by the RSA SecurID system, the user is granted access to the protected resource. If it is not recognized, the user is denied access. Organizations worldwide already rely on RSA SecurID solutions for two-factor authentication from their desktop or from a remote PC. RSA Security offers hardware tokens that can fit in a wallet or are small enough to attach to a keychain.

Device Consolidation

RSA Security also offers software authenticators to support organizations that are relying on mobile platforms as day-to-day productivity tools, and software authenticators can be centrally managed and distributed to BlackBerry devices. RSA SecurID software tokens can be loaded onto BlackBerry devices, thus eliminating the need for a user to carry a hardware token.

Secure Mobile Access to Applications

RSA Security offers strong two-factor authentication in a highly secure software implementation that enhances the already-strong security measures for BlackBerry devices and safeguards access to corporate information.

Ensuring Proof of Identity Via the RSA Authentication Manager

As the need for positive user identification and protection of valuable corporate information has increased, so has the need for an authentication solution that is a strategic, mission-critical component of an organization’s network security infrastructure. RSA® Authentication Manager is enterprise-class management software that powers strong authentication for millions of RSA SecurID end-users worldwide.

RSA Authentication Manager software is the management component of the RSA SecurID solution. It is used to verify authentication requests and centrally administer authentication policies for enterprise networks. RSA Authentication Manager software is interoperable with more network, remote access, Virtual Private Network (VPN), Internet, wireless and application solutions than any other system available today.
The availability of software-based RSA SecurID two-factor authentication allows IT administrators to make strong authentication a convenient part of doing business for mobile workers. RSA SecurID software authenticators reduce the number of items a user has to manage for safe and secure access to corporate assets.

In addition, the BlackBerry Enterprise Server integrates with RSA Authentication Manager, which ensures proof of user identity before granting access to enterprise applications. This allows IT to leverage two-factor authentication to enterprise applications. Upon login, the BlackBerry Enterprise Server redirects the user to RSA Authentication Manager, which grants access to authorized users. This allows organizations to leverage two-factor authentication to protect enterprise applications. The integration of RSA Authentication Manager with the BlackBerry Enterprise Server enables an automated log-in experience that protects enterprise applications.

RSA SecurID software tokens support the same algorithms as the industry-leading RSA SecurID hardware authenticators. Instead of being stored in an RSA SecurID hardware authenticator, the symmetric key (or “seed record”) is safeguarded securely on a user’s BlackBerry device. IT can easily distribute software tokens to users of BlackBerry devices over the air or via desktop software, and they can distribute seed records over the air to allow users to activate the tokens.

Integrating RSA SecurID Two-Factor Authentication with Blackberry Solutions

Software authentication tokens offer users a major convenience by merging RSA SecurID authentication technology onto a user’s BlackBerry device. This approach allows the user to benefit from two-factor authentication without the need to carry a separate hardware authenticator, and it provides major advantages to the enterprise.

- Companies that have already deployed BlackBerry devices can add two-factor authentication to augment security.
- Organizations that have already implemented two-factor authentication can extend their solutions to support mobile users. They can leverage their existing RSA SecurID infrastructure to allow mobile users access to applications via their BlackBerry devices.
- Companies evaluating mobile security options can deploy a joint solution from RIM and RSA Security to protect information and access while providing access to critical enterprise information.

Applications

The RSA SecurID software token implementation can support up to ten seed records, allowing a single BlackBerry device to be authenticated by multiple networks. For example a user could gain secure mobile access to the enterprise network as well as to the enterprise networks of multiple business partners. Users of BlackBerry devices can be authenticated and provided access to wireless LANs, and they can securely access intranets and extranets. The two primary applications for integrating BlackBerry devices with RSA SecurID two-factor authentication are:

- Remote access via two-factor authentication
- Mobile access via two-factor authentication
Remote Access via Two-Factor Authentication

Employees can avoid the need to carry a standalone hardware token to authenticate to the corporate network while on the road or working from home. For example, a user could rely on the software token in a BlackBerry device to gain remote access via two-factor authentication for a PC accessing enterprise applications.

Users can enter something they know—their PINs—and something they have—the constantly changing token codes on their BlackBerry devices. This allows users to easily gain remote access without the need to carry a hardware token. It allows the enterprise to reduce the costs of managing, distributing and maintaining tokens, and it also allows the enterprise to protect information and applications from access by unauthorized users.

The combined solution enhances the user experience. A user just enters a PIN and the token code appearing on the BlackBerry device, and RSA Authentication Manager accepts authorized users and grants access to enterprise resources.

Mobile Access Via Two-Factor Authentication

The computing power and robust functionality of BlackBerry devices can also be used to access corporate applications. The BlackBerry Enterprise Server and BlackBerry MDS integrate with RSA Authentication Manager, and the BlackBerry MDS is viewed as a VPN connection from a handheld platform to a corporate intranet.

Mobile users can therefore gain access to protected enterprise resources through the BlackBerry devices they hold in their hands. IT can centrally establish and enforce mobile access privileges that parallel the access privileges users would have if they were working from their desktop computers attached to the enterprise LAN.

This enables dramatic productivity improvements, since authorized users gain secure access to protected business applications wherever they are and whenever they need it. For example, a sales manager could instantly access the latest forecasts, or a field service professional could access customer account records via secure mobile access to an enterprise CRM application.
Users can rely on a BlackBerry device with a two-factor authentication token to gain secure mobile access to intranet applications.

Mobile users enter their PINs and the constantly changing codes on their BlackBerry devices to gain time-synchronous access to applications. RSA Authentication Manager authenticates legitimate users, and they gain secure mobile access to the information they need to do their jobs.
Summary

BlackBerry devices provide “Always On, Always Connected®” access to critical enterprise information. Combining RSA SecurID authentication and the BlackBerry solution creates a compelling value proposition for organizations seeking the productivity improvements of mobile access and the security benefits of two-factor authentication.

Organizations can leverage a BlackBerry device as an RSA SecurID authenticator. This approach provides the same user experience and the same strong security as hardware tokens. Companies can support easy deployment and management of large BlackBerry device fleets over-the-air, or they can support deployments in small numbers via desktop software. The enterprise can develop and enforce access privileges to diverse applications, and a single BlackBerry device can offer support for up to 10 seed records so an authorized mobile user can easily gain secure access to multiple networks.

BlackBerry Enterprise Server and BlackBerry MDS include support for RSA SecurID as a key mechanism for two-factor authentication to internal corporate applications. Organizations can increase the efficiency of mobile workers while protecting access to enterprise information by deploying proven, integrated solutions from RIM and RSA Security.

About Research In Motion (RIM)

Research In Motion is a leading designer, manufacturer and marketer of innovative wireless solutions for the worldwide mobile communications market. Through the development of integrated hardware, software and services that support multiple wireless network standards, RIM provides platforms and solutions for seamless access to time-sensitive information including email, phone, SMS messaging, Internet and intranet-based applications. RIM technology also enables a broad array of third party developers and manufacturers to enhance their products and services with wireless connectivity to data.

RIM’s portfolio of award-winning products, services and embedded technologies are used by thousands of organizations around the world and include the BlackBerry wireless platform, the RIM® Wireless Handheld™ product line, software development tools, radio-modems and software/hardware licensing agreements. Founded in 1984 and based in Waterloo, Ontario, RIM operates offices in North America, Europe and Asia Pacific. RIM is listed on the Nasdaq Stock Market (Nasdaq: RIMM) and the Toronto Stock Exchange (TSX: RIM). For more information, visit www.rim.com or www.blackberry.com.

About RSA Security Inc.

RSA Security Inc. is the expert in protecting online identities and digital assets. The inventor of core security technologies for the Internet, RSA Security leads the way in strong authentication, encryption and anti-fraud protection, bringing trust to millions of user identities and the transactions that they perform. RSA Security’s portfolio of award-winning identity and access management solutions helps businesses establish who’s who online—and what they can do.

With a strong reputation built on a 20-year history of ingenuity, leadership and proven technologies, RSA Security serves more than 21,000 customers—including financial institutions representing hundreds of millions of consumers around the globe—and its solutions interoperate with over 1,000 technology and integration partners. For more information or to download a trial RSA SecurID software token for BlackBerry devices, visit www.rsasecurity.com.
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*Check with service provider for availability, roaming arrangements and service plans. Certain features outlined in this document require a minimum version of BlackBerry Enterprise Server software, BlackBerry Desktop Software, and/or BlackBerry Device Software. May require additional application development. Prior to subscribing to or implementing any third party products or services, it is your responsibility to ensure that the airtime service provider you are working with has agreed to support all of the features of the third party products and services. Installation and use of third party products and services with RIM's products and services may require one or more patent, trademark or copyright licenses in order to avoid infringement of the intellectual property rights of others. You are solely responsible for determining whether such third party licenses are required and are responsible for acquiring any such licenses. To the extent that such intellectual property licenses may be required, RIM expressly recommends that you do not install or use these products and services until all such applicable licenses have been acquired by you or on your behalf. Your use of third party software shall be governed by and subject to you agreeing to the terms of separate software licenses, if any, for those products or services. Any third party products or services that are provided with RIM's products and services are provided “as is”. RIM makes no representation, warranty or guarantee whatsoever in relation to the third party products and services and RIM assumes no liability whatsoever in relation to the third party products and services even if RIM has been advised of the possibility of such damages or can anticipate such damages.

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