



PREDICT · PROTECT · PERFORM

# Product Overview

## Neverfail for BlackBerry® Enterprise Server Keeping your Mobile Workers Productive 24x7

Executives, road warriors and knowledge workers rely on their BlackBerry® smartphones to receive, access and interact with information that helps them make the right decision, at the right time. Uninterrupted access to email and corporate information can make the difference between success and failure of a given business decision, the results of which can affect productivity, financial performance and corporate reputation.

Keeping mobile workers constantly connected to their email and enterprise applications is mission-critical to all types of organizations. While implementing mobility strategies, nothing less than continuous availability is acceptable for BlackBerry smartphone users. This means protecting the end-to-end ecosystem in a manner that provides 24x7 access to email and mobile applications.

### The Dangers of Downtime

All email and information sent or received by a BlackBerry smartphone flows through the corporation's BlackBerry Enterprise Server. But what happens when the infrastructure supporting a BlackBerry Enterprise Server fails? What happens when hardware needs to be shut down for maintenance? What happens when there is an unplanned outage such as a software failure or even a site disaster? In short, email and data services to the BlackBerry smartphone stop – and user frustration sets in – yet these outages can and do occur.

A recent worldwide survey of email availability conducted by Osterman Research\* shows an average of almost four unplanned outages per month which would affect delivery of email or data to BlackBerry smartphones. Planned maintenance averages 11.2 outages per year. Additionally, with planned maintenance outages averaging almost once per month, Osterman therefore concludes that downtime is prevalent. If the BlackBerry business case is to be realized in practice, your BlackBerry Enterprise Server infrastructure must be fully protected and any single point of failure eliminated.

### Increased Productivity – The Case for Mobility

According to a 2007 study by Ipsos Reid\* in which where 1,335 BlackBerry smartphone users and 1,387 IT managers were surveyed, a typical user converts 60 minutes of personal downtime

### Five questions to ask BlackBerry® Enterprise Server High Availability Solution vendors.

- 1. Solution Maturity.** How mature is the proposed solution? Does it go beyond BlackBerry® Enterprise Server protection to include protection for email servers or other information sources? Is it “application-aware” with automation of failover/switchover? Are there enterprise-scale deployed references?
- 2. Solution Implementation.** Can you implement the HA solution without taking the BlackBerry® Enterprise Server out of service? Can updates to the solution also be applied without taking the BlackBerry® Enterprise Server down? Will it auto-discover and subsequently automatically protect changes to the BlackBerry® Enterprise Server configuration on both primary and secondary servers immediately? What is the impact of failover on handset connectivity?
- 3. Solution Protection.** Does the HA solution monitor the entire BlackBerry® Enterprise Server ecosystem, at the application software component level, in order to detect failure conditions? Or does it only monitor host platform availability? Specifically, will it monitor that:
  - ▶The BlackBerry® Enterprise Server services are running properly without excessive resource consumption or hung threads?
  - ▶The BlackBerry® Enterprise Server services can communicate (within acceptable response times) with the RIM® Network Operations Center, the BlackBerry® Enterprise Server SQL database, and the email system connected to the BlackBerry® Enterprise Server?
  - ▶There are no fatal error conditions reported in the BlackBerry® Enterprise Server logs?
- 4. Peace of Mind.** Does the HA solution also offer protection against site disasters by offering optimized replication and failover to a remote site over a WAN?
- 5. Affordable, simple to deploy.** Does the solution deploy over physical or virtual infrastructures without dependence on expensive infrastructure components such as shared SAN storage? Does the vendor offer simple, fixed-price deployment services?

into productive time per day. Productive use of time at airports, on trains, at coffee breaks etc. is 250 hours of recovered time per year. The annual value of this recovered time equates to \$12,500 for an employee with a \$100,000 annual salary.

In addition to personal productivity, the Ipsos Reid study reports that BlackBerry smartphone usage increases workflow and the efficiency of teams by 38 percent. Finally, the study states the average mobile user processes 2,500 time-sensitive emails per year thus placing an intrinsic value on the importance of immediacy of data and information.

In summary, the cumulative benefit of carrying a BlackBerry smartphone has been estimated to be as high as \$50,000 per user, according to the Ipsos Reid study.

### **How to Avoid Single Points of Failure and Protect the ROI**

The BlackBerry Enterprise Server is the vital link between corporate email and information systems, and the BlackBerry smartphones themselves. If the BlackBerry Enterprise Server suffers an outage it becomes the single point of failure in that link. User productivity gains and, in fact, the entire BlackBerry deployment ROI hinges on the ability of the BlackBerry Enterprise Server to deliver information to the BlackBerry smartphones 100 percent of the time. If any component within the BlackBerry Enterprise Server local environment fails, the ROI of the entire deployment is at risk.

But it's not just the BlackBerry Enterprise Server that is at risk. There is an entire corporate information ecosystem comprised of email messaging servers, corporate information databases and so forth, all of which supply information through the BlackBerry Enterprise Server onto a user's BlackBerry smartphone. Failure within any of these back-end information systems has exactly the same effect on the user as a BlackBerry Enterprise Server outage – information starvation and accessibility deprivation. There is, therefore, a pressing requirement to protect the entire end-to-end mobile infrastructure rather than solely the BlackBerry Enterprise Server in isolation.

### **Neverfail Delivers the Required Protection**

Neverfail's state-of-the art technology ensures there is always a complete, consistent and up-to-date copy of the BlackBerry Enterprise Server and its associated email and SQL databases available on a secondary server as a fully-synchronized hot standby. If anything goes wrong with the primary environment, users are connected seamlessly – without interruption – to the secondary server, and work continues.

The secondary server is more than just a copy of the data. Neverfail provides a complete, ready-to-go clone of the BlackBerry Enterprise Server, including initial configuration entries and subsequent changes that may have been applied since the BlackBerry Enterprise Server was first installed.

With Neverfail, no BlackBerry Enterprise Server re-initialization is required at switchover so users keep working without delays. In fact, neither they nor their devices are even aware that they are connected and communicating through a secondary server in the case of a failure of the primary server. Business continues.

Exactly the same level of protection can be applied to systems that supply information to the BlackBerry. Neverfail has solutions to protect Microsoft Exchange® and IBM® Domino®, mobile application databases powered by SQL Server and ancillary anti-virus programs.

## **Neverfail for BlackBerry® Enterprise Server Features and Benefits**

- ▶ Keeps mobile users connected without interruption, despite IT failure
- ▶ Protects the corporate BlackBerry Enterprise Server ecosystem including applications, hardware, network and data
- ▶ Delivers High Availability, Disaster Recovery and Business Continuity
- ▶ Compatible with third party BlackBerry Enterprise Server monitoring Tools such as Conceivium , BoxTone and Zenprise
- ▶ Enables planned maintenance without downtime at the push of a button
- ▶ Failover in less than two minutes, automated switchback without scripts
- ▶ Supports LAN and WAN deployments
- ▶ Protects against SRP lockout
- ▶ Requires no shared storage technologies
- ▶ Rapid implementation
- ▶ Part of Neverfail's end-to-end application protection

**“Workforce mobility is a key strategic consideration for business managers today and the BlackBerry® Enterprise Server solution is renowned for helping mobile professionals become more productive and responsive. Neverfail's mobile continuity solution for BlackBerry Enterprise Server adds an additional layer of protection to keep users connected while on the go.”**

**Jeff McDowell, Vice President, Global Alliances - Research In Motion**

# Focusing on Business - Neverfail's Application Management Framework

Too often IT system architectures fail to account for the impact on the user. Traditional mechanisms to protect the BlackBerry Enterprise Server may be based on rapid recovery from a disk backup. Yet for BlackBerry smartphone users to resume working this may require a complete re-connection of the BlackBerry Enterprise Server to the entire handset population, which could take hours. Failure to keep users seamlessly connected throughout outages is guaranteed to disrupt business, no matter how robust the backup and recovery software may be.

Prior to Neverfail for BlackBerry Enterprise Server, options for protecting BlackBerry Enterprise Server service delivery have been either inappropriate or incomplete. Strategies relying on manual failover to a backup BlackBerry Enterprise Server are simply too complex and time consuming. Alternative product solutions are either incomplete (in that they detect only a very restricted range of failure conditions), not sufficiently automated in their operation (thus requiring manual user intervention and error-prone scripting), or have simply been promised but never delivered.

As a leading innovator of business continuity solutions, Neverfail has always focused on how best to ensure BlackBerry Enterprise Server continuity of service to the business. By focusing on continuous availability, Neverfail solutions are architected to anticipate IT downtime, yet ensure that application service continues through any type of corporate infrastructure threat, ranging from operator error, application software issues, hardware failures, to a complete site disaster. The key benefit Neverfail delivers to its customers is complete assurance that no business downtime will be experienced by BlackBerry® smartphone users caused by corporate infrastructure issues affecting BlackBerry Enterprise Servers, email or applications. This is only possible through deep understanding of best practice monitoring and management of the BlackBerry Enterprise Server and the systems that supply information to it, including Microsoft® Exchange, Microsoft® SQL Server, Lotus Domino and more.

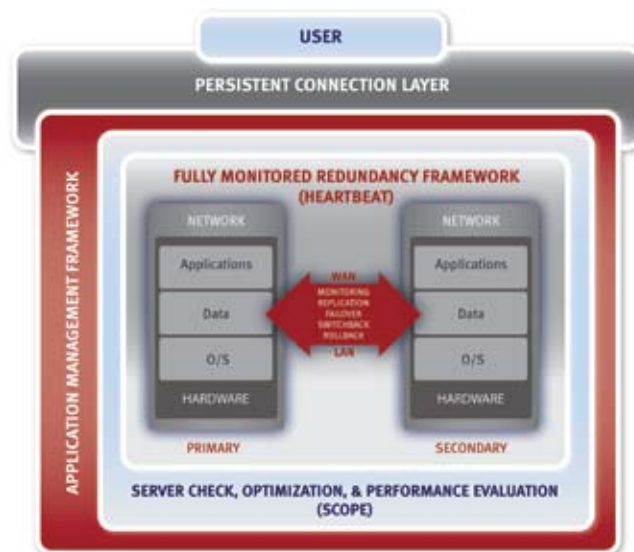
The key innovation that enables best practice monitoring, failure-detection and management is Neverfail's Application Manage-

ment Framework (AMF). AMF delivers an industry leading framework that combines instrumentation to detect failure conditions with best practices to determine when to failover. Extensible rules that anticipate causes of downtime and detect and resolve application threats are applied in real-time to protect BlackBerry Enterprise Servers. Accordingly, Neverfail believes that AMF delivers a significant step forward in the quest to deliver high availability, disaster recovery and, ultimately, business continuity for the corporate mobile platform.

For BlackBerry Enterprise Server deployments, the AMF understands that multiple components must function and collaborate correctly for service to be delivered. For example, the BlackBerry

Enterprise Server itself comprises multiple Windows services that must all execute correctly within certain performance tolerances and with sufficient system resource availability. These services, in turn, must be able to communicate with other key infrastructure components, such as the dedicated SQL database, email system, RIM® Network Operations Center, and so forth. The AMF continuously monitors these parameters and understands the specific protection requirements for each application component and how these components interrelate. It knows which data to replicate at what time, which services to monitor, and how to execute many additional built-in and user-defined rules.

## NEVERFAIL SCHEMATIC OVERVIEW



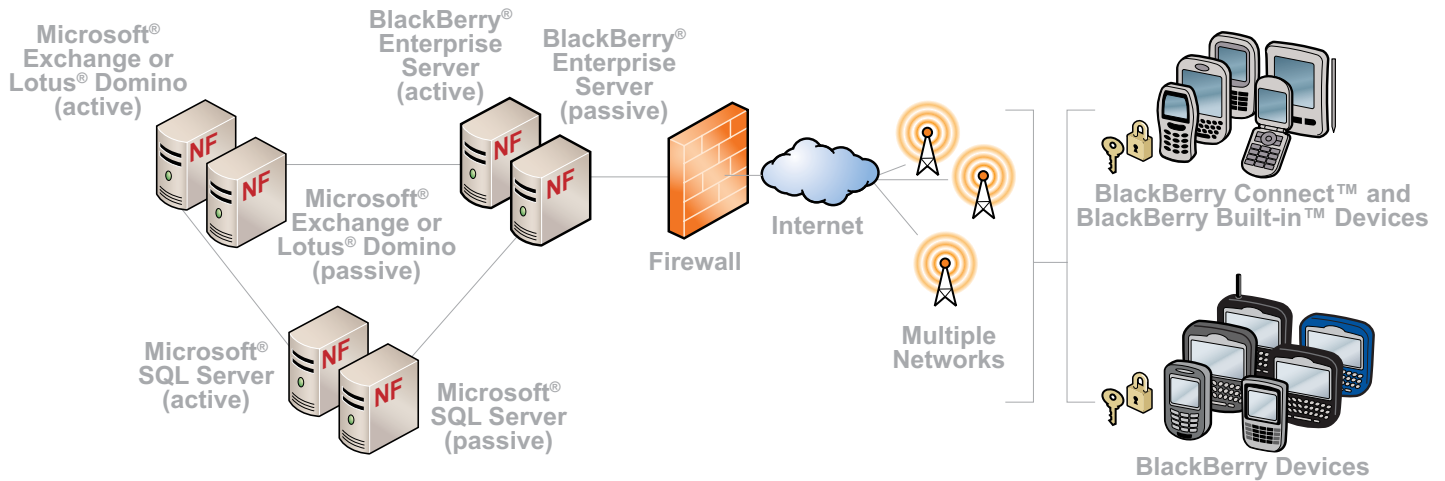
When a threat is detected, Neverfail can automate the entire failover process based on pre-defined criteria within the AMF "rules." In the event that planned maintenance requires a primary BlackBerry Enterprise Server to be taken out of service, an administrator may (in an entirely automated fashion at the click of one button) gracefully switchover from the primary to the secondary BlackBerry Enterprise Server. Administrators with limited knowledge of, or experience with, operating a BlackBerry Enterprise Server can easily deploy complete protection because best practice knowledge is already embedded into Neverfail's AMF. On the other hand, experienced administrators can add to, or update, the pre-existing set of AMF rules to take into account unique requirements specific to their BlackBerry Enterprise Server deployment.

**"With \$8 billion in total client assets under advisement, we felt it was imperative to provide our workers with uninterrupted access to their mobile devices and information at all times. Through their alliances with firms like RIM, Neverfail is able to provide leading organizations with a very advanced mobile continuity platform."**

Robert Trinchet, CIO - AMA Global

# Neverfail Provides Full Mobile Ecosystem Protection

Combining the next generation of application management with full ecosystem protection, Neverfail provides IT administrators with confidence that the application stack as well as the IT ecosystem surrounding the mobility platform remains health. When issues do occur, mission-critical applications are continuously available to end-users through Neverfail's Continuous Availability Suite of products. In short, Neverfail's Application Management Framework keeps BlackBerry® smartphone users working and connected to their email and information systems through any type of IT outage.



Neverfail Provides 24x7 Continuous Availability for the Entire Blackberry Enterprise Server Ecosystem including the BES, Microsoft Exchange, Lotus Domino, SQL Server, Anti-Spam and Anti-Virus and third party BES monitoring tools such as Conceivium and BoxTone (note: LAN deployment shown)

**“Neverfail is unique. Its nearest competitor only delivers 50 percent of the functionality.”**

**Timo Sillober, Head of Office IT  
Vodafone Group Services GmbH**

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\*Osterman Research – “Planning for Improved Email Availability, an Osterman Research White Paper, 2007

\*Ipsos Reid – Research Study: Analyzing the Return On Investment of a BlackBerry Deployments, 2007