

MAKING SURE BLACKBERRY USERS GET THEIR FIX: A CONVERSATION WITH ZENPRISE

On subways, at the airport, under the conference table at meetings – even, to the chagrin of their spouses, at home in bed – business people are fast and endlessly at work thumbing messages to their colleagues and clients on their Blackberry devices. These messages travel a circuitous path, across the airwaves of cellular carriers, through the Research in Motion (RIM) network that is at the heart of the Blackberry service, and throughout an enterprise's own network. Enterprise users of Blackberry devices are growing at a compound growth rate in excess of 100 percent every year, and as more and more enterprises rely on Blackberries for mission-critical communications and mobile applications, maintaining system up-time and supporting users becomes a paramount task. Zenprise is an industry leader in troubleshooting for Blackberry and Exchange users. Benchmark recently talked with Ahmed Dattoo, Zenprise vice president of marketing, to learn about the solutions Zenprise provides to keep Blackberry users connected.

Benchmark: What's at the heart of the Zenprise service offering to the Blackberry user market and what sets it apart?

Ahmed Dattoo: Zenprise develops software that automatically troubleshoots Blackberry end-user issues. What really makes us unique, unlike your pure monitoring software solutions, is that Zenprise identifies the root cause of end-user issues and provides very detailed resolution steps to fix these problems.

For example, in February the whole entire RIM network was down and there was a lot of news coverage around the fact that Blackberry users were not able to send or receive email messages. And it took organizations with Blackberry networks a fairly long time to actually figure that out. They either figured it out through the news, or if they were a really large RIM customer, RIM would send them an email or they would call up their carrier to find out.

Benchmark: And so how quickly were Zenprise customers notified about the problem?

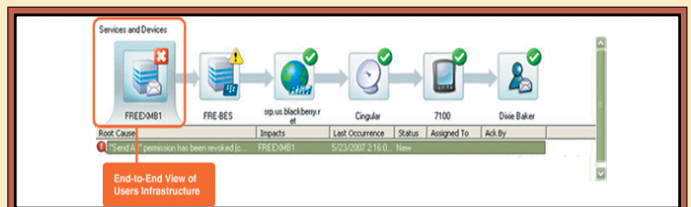
Ahmed Dattoo: The RIM network went down about 3:20 Eastern Time. One of our customers told us that by around 3:23-3:24, they got a notification from Zenprise saying the RIM network was down. They immediately called up their telecommunications provider to ask if they were seeing any sort of problems with RIM. The

telecommunications provider hadn't – they didn't know that RIM had an outage. They claimed everything was okay. It turned out when you followed the news that it was at about 3:30 pm, about 10 minutes after the outage happened, that carriers like AT&T first got notified by RIM. So our customers actually got advance notice even before the carriers realized that an outage had happened.

Benchmark: That's pretty impressive, that your customers were alerted even before the carriers realized there was a problem with the RIM network. Walk us through the process that enables you to pinpoint the cause of a problem so precisely.

Ahmed Dattoo: OK, so if you think about the Blackberry service, it's composed of many individual parts. At the very edge you've got the Blackberry device and we monitor the Blackberry device. Then you have the carrier network that all of your message traffic goes through. You also have the RIM network that all that message traffic goes through. And then it reaches your outside firewall in your enterprise and then it goes through a couple of different stages, through routers, switches, et cetera, before it gets to the Blackberry server. That Blackberry server in turn talks to your mail server, it talks to your network infrastructure, it may talk to storage devices, it will definitely talk to a SQL database.

We monitor all those different components and whenever there's a problem we'll tell you where the problem is. You know, your problem is the OS that you're running on this device is outdated and there's a known problem with calendar synchronization. Or the amount of memory on your device is low and that's why you're not able to receive new messages. Or there's a configuration problem on your mail server that's preventing this user from being able to synchronize their calendar.



Zenprise provides complete visibility of every stage of the Blackberry message infrastructure, enabling effective and rapid troubleshooting.

Benchmark: So how does Keynote fit into the picture?

Ahmed Datto: Zenprise provides the perspective from inside out — we’re analyzing all of the Enterprise’s core infrastructure to make sure that there are no problems in that infrastructure and we correlate any sorts of user-related issues with problems that we’re seeing out at the edge. The complication comes when there is a problem outside the infrastructure like the RIM network going down, like AT&T having issues or Verizon or T-Mobile. And so the question was how can we provide visibility into those types of issues?

Benchmark: And that’s where Keynote comes in?

Ahmed Datto: Right. That’s where we decided to partner with Keynote, because Keynote actually has points of presence in locations around the globe — data center locations around the globe — and they have points of presence on multiple carriers. So we chose New York as a pilot location and we plan on rolling out a service with Keynote to provide us the outside-in perspective, meaning, here’s what your actual response times are from these Blackberry devices, here’s your carrier availability for these Blackberry devices.

Benchmark: So essentially Keynote will give you the last piece of the puzzle. Zenprise has a perspective on everything inside the network, and now with Keynote, full end-to-end visibility that you can use to help your customers troubleshoot problems.

Ahmed Datto: Yes, it will allow us to have that outside perspective. So now when a user is having a problem, we can tell them whether it’s a device-related issue, whether their battery is low, or whether they are in an area where they don’t have network coverage, for example. We can also tell them whether there’s a problem with the Blackberry server or the exchange server or their network infrastructure. And then the last piece of the puzzle is whether there’s a problem with the carrier.

Benchmark: So how have you been monitoring potential carrier problems up until now? Has it just been a process of elimination, that is, if you can look at everything else and there’s not a problem, then it must be the carrier?

Ahmed Datto: Actually, there are a series of statistics that the Blackberry server provides that you can extrapolate as to whether there’s a carrier-related issue. But it is not a true, accurate, out-at-the-edge way of measuring the mailability. But that is what Keynote will enable us to do, to get an actual read of carrier performance.

Benchmark: Right now you’re offering the external monitoring service using Keynote just in New York City?

Ahmed Datto: Yes, it’s a pilot program that we’re testing. We’ve

deployed their mobile monitoring agents for Blackberry users in New York on Sprint, Verizon, T-Mobile and AT&T.

Benchmark: And what specifically are you monitoring?

Ahmed Datto: We’re testing a couple of different things. We’re testing carrier availability in terms of the Blackberry service. And we’re testing response time — mail delivery response time.

Benchmark: And how are you doing that?

Ahmed Datto: In the first phase, we’re taking these Blackberry devices, and putting them into a data center location in New York. We will actually send test email messages from those Blackberry devices to a Blackberry server that we host. Then we will validate that those messages actually are able to get sent. We will also measure how long it takes for those messages to get delivered. And start making some determinations around what is your performance in New York on T-Mobile versus Verizon versus AT&T versus Sprint.

We will also have the ability to check availability, so when that message fails to get delivered — when we have not received that message that is being sent — we start kicking in a root cause analysis. So we start determining is there a problem going on in the Blackberry infrastructure that’s causing this mail not to be received? Or we’d actually look at the signal strength on the device — and that’s one of the things that Keynote is able to provide — so we’ll be able to see whether the data network is available, whether the cellular coverage is available, voice is available, et cetera.

User	BES	Exchange	Carrier	Service Availability	Message Latency
Ahmed Datto	FRE-BES	FREEXMB1	Cingular	Good	Good
Doree Baker	FRE-BES	FREEXMB1	Cingular	Good	Good
Jay Guasch	FRE-BES	FREEXMB1	Cingular	Good	Good
Dana Willis	FRE-BES	FREEXMB1	T-Mobile	Good	Good

Quickly Identify Carrier Issues Impacting Users

Zenprise provides visibility not only for internal networks and infrastructure, but for the carrier networks as well. With the implementation of Keynote monitoring services, Zenprise is able to provide even more accurate monitoring of carrier signal and also of application performance for the end user.

Benchmark: OK, you called that “phase one.” What’s the next phase?

Ahmed Datto: The next thing we want to do is allow our customers to deploy whatever applications they may be running on the Blackberry device onto these points of presence. Increasingly what we’re starting to see is in the enterprise, people are starting to deploy package applications or develop custom applications.

They are doing things like, they'll create a CRM application for their Blackberry device or they'll use things like Reuters or Bloomberg on the handset. And so we want to give our customers the ability to install these applications on these Blackberry devices and be able to measure response times. So if we're starting to see a degradation of performance from the outside in, we can start correlating from the network infrastructure standpoint — are there any sorts of problems that are going on for this particular customer in terms of their infrastructure? Or is this just an issue with a carrier being slow or something along those lines? And then also being able to proactively detect when the application is not available out at the edge. That's where the service will evolve to.

Benchmark: This sounds like a very valuable service to enterprise Blackberry users. After you get the read on New York results, is the plan to roll out this service using Keynote nationwide?

Ahmed Dattoo: Absolutely.

Benchmark: And you seem confident that Blackberry is going to remain the standard for mobile business communications going forward, even with a rash of new, more powerful smart phones coming into the marketplace?

Ahmed Dattoo: Blackberry seems really to have capitalized on the enterprise market. They have a series of sets of features that make administration of the device very, very easy within the enterprise. They have security features that none of the other companies seem to have, so they've really carved out a niche on the enterprise side.

Then you've got companies like Microsoft that are trying to make further inroads with their sets of devices. I think everyone is trying to capitalize on the growing user base. Anecdotally, what we're seeing in some of these enterprises is that most are at less than 10 percent penetration with any sort of mobile email device. Now, the really sophisticated organizations will have penetrations that are at the 30 to 60 percent range, but not even close to 100 percent penetration. So there's a lot of room in terms of mobilizing the work force.

Benchmark: OK, if you could broaden your lens for us and paint a picture one year, five years, ten years out of what you think it's going to look like for business people running around with these devices in their hands. What are the devices going to be doing, what tasks will they handle, what is the marketplace going to look like?

Ahmed Dattoo: If I were to paint the picture very broadly, I would say that people are going to be able to do everything on these devices that they can do on their PC. In fact, I would be so bold as to suggest that you'll have a whole class of employees within the

enterprise that don't get issued a PC, they get issued a Blackberry or a mobile device. If you think about it, there are different sets of employees and you'll have some employees that are basically road warriors — sales people for example. What do they really need their PC for? Email, probably their contact management system? You know, sales contact management for their CRM? And Internet access. And all of those can be provided on the mobile device. There's going to be a class of users that are going to be just using the Blackberry device or using a mobile device in general.

Benchmark: So traditional business functionality that you'd expect can or should be done on a mobile device. But what are some of the new ways these devices will be used that maybe we haven't seen yet?

Ahmed Dattoo: Not only on the business side, but on the consumer side you're going to start to see these devices being used more and more for transactional kinds of things. As an example, when you go to the airport now, rather than actually printing out your boarding pass, you can actually just scan the bar code from your mobile device if you have the email.

So you're going to start to see these devices being used for a lot more sets of things in terms of just overall transactions. What's not to say that you won't use your mobile device as you go through one of those Fast Tracks for tolls? You won't need one of those decoders.

Benchmark: What do you see as the biggest challenges to adopting these kinds of transactional functionalities?

Ahmed Dattoo: I think the biggest challenge is going to be how to know when something's not working. For example, these airlines have spent a lot of money in terms of building out mainframe systems for their billing and ticketing systems because those are the most reliable. So when you start having users that are using their mobile devices to do things like transactions, how do you know, when a transaction doesn't go through, that the problem is something with the transaction systems on the back end, whether it's a carrier-related issue, whether it's a device problem? Or whether it was a user error? And same thing in the enterprise, as you start deploying more and more applications for this device, this device becomes more and more mission critical.

You know, email is one thing but if you're starting to use your billing systems, your order entry systems and all these sorts of things on these devices, when there is any sort of problem, it significantly impacts the business. So, on the enterprise side, the challenge is going to be how do you build up the infrastructure and the capabilities to be able to proactively detect when there is a problem? Because when there is a problem it's going to have a significant impact on the business.

Benchmark: And we would wager you have some good ideas for how people can solve those challenges.

Ahmed Datto: Exactly. Clearly they can use a product like ours where they can go through the process of building these sets of systems on their own.



Ahmed Datto

Vice President of Marketing,
Zenprise

Ahmed's experience in the technology industry spans strategic planning, brand marketing, software engineering, and product management. Prior to Zenprise, Ahmed was at EDS where he was a global Director of Product Development. While at EDS, Ahmed built and launched several workflow automation and monitoring automation modules that generated multi-million dollar savings globally. Prior to EDS, Ahmed was on Loudcloud's product management team where he focused on monitoring, storage, and performance networking products. Before that Ahmed was a brand manager at Yahoo! where he co-developed the tv, print, and radio promotions for Yahoo! Shopping. Ahmed started his career as a strategy consultant at Accenture where he created high tech product development strategies for telcos, media conglomerates, and hardware manufacturers. Ahmed holds an MBA, MA, and BA from Stanford University.