



Best practices for having an application service provider host a BlackBerry Enterprise Server

Originally posted: January 2003

Introduction

There are several types of application service providers (ASPs). The two most common services are dedicated service providers and open systems providers.

Most ASPs currently offer dedicated services, which means that customers run their application software on computer hardware and software that is dedicated solely to the individual customer. In many cases, the customer must provide or buy from the ASP the computers, operating systems, application software, and communications system. The customer also provides a dedicated communication system such as T1 connectivity or high-speed Internet access to the remotely managed application program. The ASP installs, houses, manages, and maintains the customer's system at its facility. Typically, customers pay for hardware and software in advance and must commit to a long-term management service agreement.

In contrast, open systems ASPs already have computers, communications, hardware with operating systems, and application software in place, so that the customers do not buy or supply anything. This type of ASP offers the use of their systems on either a month-to-month subscription, or for a longer subscription term with reduced fees. The only out-of-pocket customer expense is a small initial set-up fee and the first month's subscription fee.

If a BlackBerry™ Enterprise Server will be hosted at an ASP, it should be an ASP that offers dedicated services so that you can specify and provide the exact hardware to be used.

When contracting an ASP to host a BlackBerry Enterprise Server environment, there are several items to consider. This document provides, from RIM's perspective, the main items to consider when contracting with an ASP to host a BlackBerry Enterprise Server environment.

Service provider considerations

Service	Considerations
Services hosted	<p>Does the ASP already host email service for your company? If so, is your company email hosted on a shared email server on which other companies also have email hosted?</p> <p>The BlackBerry Enterprise Server solution requires a one-to-one relationship with an email system or the BlackBerry Enterprise Server might retrieve email addresses for other, external users. The address lookup function of the BlackBerry Enterprise Server has access to the entire Global Address List for Microsoft® Exchange, and the Notes Name and Address Book for Lotus® Domino™. One BlackBerry server cannot point to an email server that hosts multiple companies unless the active directories are divided properly.</p>



Best practices for having an application service provider host a BlackBerry Enterprise Server

Security	<p>Will the ASP also host your email servers?</p> <p>If so, they will have access to your users' email addresses, as well as the BlackBerry users' PINs. This is typically sensitive company information and should be protected. Make sure that you are comfortable with the non-disclosure agreement that you sign with the ASP.</p> <p>It is more secure if the ASP dedicates an email server that is strictly for your company, so that the BlackBerry Enterprise Server does not accidentally have access to any email addresses of other companies that the server hosts.</p> <p>Determine the extent of network access that the ASP needs in your company, as well as any user account information for service accounts.</p>
Connectivity/ Bandwidth	<p>Will you have a dedicated link to the ASP or share one with other customers?</p> <p>The bandwidth and Committed Information Rate (CIR) on the leased line into the ASP should be as high as practical limits allow.</p> <p>If email is not hosted at the ASP, the link to the ASP becomes critical. Are there redundant paths?</p> <p>The MAPI protocol is not a WAN protocol and does not work as well across WAN links as it does across higher speed LANs. If your email is not hosted at the ASP, you might need to spend more money on a higher speed link to the ASP.</p> <p>Will the BlackBerry Enterprise Server be able to communicate with your internal Domain Name Servers (DNSs)?</p>
Administration	<p>Who manages the BlackBerry Enterprise Server? Do your employees have access to the server at the ASP for day-to-day tasks and testing?</p> <p>Will your ASP require that it support the BlackBerry Enterprise Server daily operations, including troubleshooting problems with Research In Motion®, answering customer support calls, and testing changes to the system?</p> <p>If the ASP provides BlackBerry Enterprise Server support, add support personnel names from the ASP to your named-caller list that accompanies your technical support contract with Research In Motion.</p> <p>Will your company maintain support internally for the BlackBerry Enterprise Server? If so, when users call your help desk, will your help desk personnel have the necessary access to the BlackBerry Enterprise Server to allow them to do their job?</p> <p>How will you perform change management?</p> <p>Can you expect the ASP to have enough expertise with your mail system and with BlackBerry to manage the server?</p> <p>Will the ASP require a complete test environment in which it can test new versions of the BlackBerry Enterprise Server? It is common for an ASP to not allow you to upgrade your application until it has performed testing in its own environment to determine whether it affects other users.</p>
Service level	<p>You will want to determine an acceptable level of service from the ASP regarding problem response time, bandwidth, maintenance, backups, and so on.</p>
Disaster recovery	<p>Will the contract with the ASP use ASP hardware as standby servers or will you provide additional server hardware that is installed at the ASP for this purpose?</p> <p>Will you train the ASP on how to recover a BlackBerry Enterprise Server failure?</p>



Best practices for having an application service provider host a BlackBerry Enterprise Server

Procurement deployment	Will the ASP provide services in this area?
Monitoring	Does the ASP monitor the hardware 24-hours-a-day, 7-days-a-week? Does the ASP use NetIQ? To use a BlackBerry NetIQ agent, verify that the ASP allows it.

BlackBerry considerations

Software	Considerations
Microsoft Exchange	If you use Microsoft Exchange 2000, the BlackBerry Enterprise Server needs access to a Global Catalogue Server to perform Global Address List lookups. Are you able to provide that capability across the link? Will you need to place a domain controller for your Windows 2000 network at the ASP also? Will you use Microsoft SQL or MSDE to store the database for your BlackBerry Enterprise Server? If you use SQL, will the ASP host this for you?
Lotus Domino	In a Lotus Domino environment, because the BlackBerry server is also a Domino mail server, you must secure it so that external users cannot use the server to send mail from your mail system. The ASP will have access to the Lotus Domino Server ID file. This means that it can run the <code>Domino nlnotes.exe</code> program under the context of the server ID. You might consider virus protection for a BlackBerry Enterprise Server for Lotus Domino. It can scan the mailbox as messages are routed to the intended internal recipient. Will the ASP provide this service?
Third-party software	Will your company want to use a third-party attachment reader, Sales Force Automation (SFA), SAP, or human resources application on the BlackBerry handhelds? If so, will the ASP host those servers as well?
Mobile Data Service (MDS)	The firewall configurations should allow the MDS to connect to internal web servers in your network.

Recommendations

Research In Motion provides these considerations for companies that find it necessary, or want to explore hosting a BlackBerry Enterprise Server at an ASP. Research In Motion does not recommend the ASP model as the most appropriate environment for running BlackBerry services, but it can be used when necessary.

The complexity of the administration and networking that is involved in this model should be the primary factors that influence any decision to work with an ASP.

Because the BlackBerry Enterprise Server works closely with a company's email system, separating them could possibly lead to communication problems, delayed delivery times, and an overall unsatisfactory user experience.

The BlackBerry solution is an affordable enterprise package. The monthly costs associated with managing the server and the users can be easily recovered in monthly billing for email service to users.

If an ASP hosts the BlackBerry Enterprise Server, you will pay monthly service charges for hosting and administration. On an annual basis, this is often more expensive than providing the service yourself.



Best practices for having an application service provider host a BlackBerry Enterprise Server

Part number: TAE-00059-001

© 2003 Research In Motion Limited. All rights reserved. The BlackBerry and RIM families of related marks, images and symbols are the exclusive properties of Research In Motion Limited. RIM, Research In Motion, 'Always On, Always Connected', the "envelope in motion" symbol and the BlackBerry logo are registered with the U.S. Patent and Trademark Office and may be pending or registered in other countries. All other brands, product names, company names, trademarks and service marks are the properties of their respective owners. The handheld and/or associated software are protected by copyright, international treaties and various patents, including one or more of the following U.S. patents: 6,278,442; 6,271,605; 6,219,694; 6,075,470; 6,073,318; D,445,428; D,433,460; D,416,256. Other patents are registered or pending in various countries around the world. Please visit www.rim.net/patents.shtml for a current listing of applicable patents.

RESEARCH IN MOTION LIMITED (RIM) ON BEHALF OF ITSELF AND ITS AFFILIATES MAKES NO REPRESENTATIONS ABOUT THE SUITABILITY OF THE INFORMATION OR GRAPHICS CONTAINED IN THIS ADVISORY FOR ANY PURPOSE. THE CONTENT CONTAINED IN THIS DOCUMENT, INCLUDING RELATED GRAPHICS, ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND. RIM HEREBY DISCLAIMS ALL WARRANTIES AND CONDITIONS WITH REGARD TO THIS INFORMATION, INCLUDING ALL IMPLIED WARRANTIES AND CONDITIONS OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT. IN NO EVENT SHALL RIM BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF INFORMATION CONTAINED HEREIN. THIS DOCUMENT, INCLUDING ANY GRAPHICS CONTAINED WITHIN THE DOCUMENT, MAY CONTAIN TECHNICAL INACCURACIES OR TYPOGRAPHICAL ERRORS. UPDATES ARE PERIODICALLY MADE TO THE INFORMATION HEREIN AND RIM MAY MAKE IMPROVEMENTS AND/OR CHANGES IN THE PRODUCT(S) AND/OR THE PROGRAM(S) DESCRIBED HEREIN AT ANY TIME WITHOUT NOTICE.