

# coreFusion:

Riding the ASP Wave

*Wohl Associates is a consulting and market research firm whose focus is on new and emerging technology and new market formation*

*prepared for IBM by*

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## EXECUTIVE SUMMARY

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### **e-business Case Study: coreFusion**

coreFusion is a Canadian Application Service Provider (ASP), which has turned a successful assignment in outsourcing Lotus Notes e-mail into a new business in the infant ASP market.

Implementing on both the Linux and NT platforms, coreFusion has leveraged its staff's extensive experience with Lotus Notes and Domino and the application development experience of Lotus Business Partners to provide customers with a variety of applications. The president of coreFusion said, "Using Linux as a hosting platform reduces the maintenance time by more than 50% for coreFusion's technical support staff."

coreFusion will grow in multiple dimensions, adding customers while it adds additional applications. The application growth will include applications from ISV's and Lotus Business Partners, as well as business applications developed in partnership with business partners and customers.

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### ***The coreFusion e-business Solution***

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#### ***Application***

- ASP for Lotus Notes Applications and Web Hosting

#### ***coreFusion Business Benefits***

- New business opportunity built on ASP business model
- Chance to leverage Notes expertise and Notes Business Partner relationships

#### ***Customer Business Benefits***

- Reduced time to market
- Easy path to scalability and growth of systems
- Reduced costs
- No capital investments required

#### ***IBM Technology***

- Lotus Domino
- Lotus Notes
- IBM WebSphere
- IBM DB2
- IBM Netfinity Servers

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## coreFusion

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### **Who is coreFusion?**

coreFusion is a Canadian company that created itself as an ASP to take advantage of this new business model and the exciting business opportunities the ASP market is expected to afford. The company specializes in Lotus Domino applications, Web Hosting, and Lotus Notes for e-mail implemented on both Windows NT and Linux platforms. It also offers Web hosting solutions for WebSphere, Microsoft IIS, DB2, SQL server and HTML. With a focus on hosted applications running on Lotus Domino, combined with extensive Notes and Domino experience, coreFusion positions itself as being uniquely qualified to provide the best possible hosting for its customers.

### **What is the Business Problem for coreFusion?**

coreFusion entered the application hosting business because of the successes of its founder as part of a larger organization. A core competency from that experience is consolidating and managing multiple e-mail systems. coreFusion's founder had successfully consolidated 13 systems, and managed the resulting single system for CIBC, one of Canada's leading banks. Today, 90% of coreFusion's support team have Domino expertise and 70% of their customers use Domino.



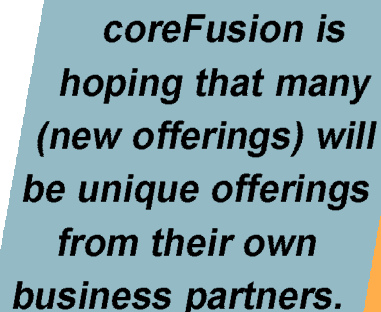
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As a consequence of its success, coreFusion was set up to offer application hosting through the ASP business model. This is viewed as a primary, first offering. coreFusion will need to not only grow its customer base to succeed, but also attract software developers who want to partner with coreFusion to host their applications, providing both a channel to market and a way of offering the applications in a supported environment.

### ***What is the Business Problem for coreFusion's Customers?***

Many businesses need the functions of coreFusion, but the main interest is from the small and medium businesses who must have a robust, secure, and scalable e-mail system, but find it difficult to implement, maintain, support, and grow such systems. coreFusion can offer each customer exactly as much service and support as they need, and then grow that service with the customer. coreFusion customers can add users as their firm's needs grow; in an ASP environment, any business model can be supported, with full security, so contractors, business partners, and customers can also be part of the e-mail system.

coreFusion's offerings will grow, too, so that as customers grow satisfied with the idea of an ASP they can add additional applications. coreFusion is hoping that many of them will be unique offerings from their own business partners. Recently through participation in IBM and Lotus marketing activities, coreFusion has been receiving many new leads for customers. Some of these customers are other business partners who are looking for a managed way to run their businesses. Many need to be able to scale their IT expenses as they grow.



***coreFusion is hoping that many (new offerings) will be unique offerings from their own business partners.***

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## **The ASP Market**

A new computing model has surfaced as applications become more complex to implement and administer and IT staff becomes more scarce and expensive. In this model, an Application Service Provider provides hosted applications to users. The user does not need to have any in-house IT expertise to implement or support these applications and avoids the capital expense of buying the software and the hardware platforms it requires. Instead, user organizations rent the use of applications, typically on a monthly basis, plus their necessary support.

The ASP market — and ASPs — are still in their infancy. In 1999 the market was about \$200 million but research houses like Forrester and IDC expect it to be in the \$15 to \$20 billion range in just a few years. Most ASPs number their customers at fewer than 100 companies. Today, many ASPs are offering only one or a few hosted applications. This is such an infant, but growing market. Most businesses haven't used an ASP yet. Surveys taken in the past year indicate that fewer than half had plans to try one. This is changing rapidly.

But ASPs have ambitious plans to match the ambitious market forecasts. Expanding in every dimension, they expect:

- the market to grow exponentially as customers are educated to the economics and benefits of the ASP model.
- to offer many services, including hosted applications, as well as network connectivity, support, and others.
- to be able to select from an explosively growing selection of new software, architected to take advantage of the Internet as its platform and distribution vehicle. Some of these applications will be reinterpretations of client/server ones, but others will be entirely new, brought to life by the capabilities of the Web.

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## ***The Customer Benefits of the ASP Model***

But the ASP business model isn't just about ASPs making money. It's also about the value proposition the model offers an ASPs' customers. Those values can be substantial:

**No Capital Investment:** The ASP provides the Data Center, all hardware, and software. Customers pay for what they use, typically on a monthly subscription basis. This permits capital to be used for revenue generation, whether that's money for manpower, marketing, or product acquisition.

**No or Low Implementation Costs:** Installing complex software can be expensive, can require skilled staff or contractors, and can include potential risks. In the ASP environment, software is already installed, ready on tap for immediate usage. Typically there is no implementation cost for generic applications. If customization is required (extensive customization is usually discouraged or rejected in the ASP model), some implementation costs will be incurred, but they may sometimes be spread across a multi-month or multi-year contract.

Another approach which many ASPs are using is to work with an early customer to make sure that the industry expertise is incorporated in the application. The ASP then lets the customer exchange this expertise for usage. Thus the ASP gains an application which is well-designed and the customer gets an application which works just the way that the customer wants it to at a low cost.

**Reduced Time to Market:** Since implementation can be accomplished more quickly, tasks based on the ASP-hosted application can get to market faster. This can save valuable time in launching a product or promotion. Reduced time to market can result in higher revenue, market share, and profits, so this is particularly appealing to high technology companies and startups that work in highly competitive markets.

**Nearly Infinite Scalability:** When customers implement their own solutions, size counts. Adding even a few more users may mean buying additional hardware and software, reconfiguring systems and networks, or moving up to whole new architectures. In the ASP world, scalability is the ASPs challenge. Adding users is simply adding (and paying for) more users; invisibly, the ASP adds additional capacity and manages and supports the underlying network.

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**Permits Customers to Focus Scarce Technical Resources on Mission Critical Tasks:** With a vast and growing shortage of IT technical staff, companies find it difficult to hire and retain programmers, systems administrators, and network specialists. ASPs, of course, must face the same struggle, but because they are perceived as a new business opportunity and because they achieve greater economies of scale, they can often provide better financial and other incentives. The ASP takes on the problem, under contractual obligation, allowing user organizations to point their technical staff at the mission critical tasks that the business gives its highest priority.

**Lower Support Costs:** Because ASPs have economies of scale and centralization, it's much less expensive for them to provide user support. These savings are shared with customers via the ASP pricing model.

**Improved Security:** ASPs offer hardened facilities with good physical security, backup for electricity and connections to the internet. ASPs add many systems functions to the physical security of the building to enhance the trust of the customer. These will include procedures for backing up the system, and monitoring for failures. The ASP would also have a state of the art firewall and alarms when a hacker is present. The customer feels very comfortable with the provisions for security. In many cases, it exceeds that which the customer may have in his own data processing operation. The completeness of the package assures the trust of the customer.

### ***Choosing IBM***

coreFusion selected IBM because it is the supplier of Notes, their e-mail system of choice. This selection was based on the successful prior experience of coreFusion's management with Domino and Notes. "IBM's service is hands-down better than anyone else's in the business," says Pete McPhedran, coreFusion's President. coreFusion felt it would be able to provide a robust hosted e-mail environment for small and medium businesses as well as a platform for hosting partners' applications.

### ***The Implementation Process***

By using a basic approach to Domino Hosting, coreFusion is able to install and manage servers and software and to allow the customer to provide support of the identities and job descriptions of the users. By advancing that to the new Domino Hosting Support, where multiple virtual

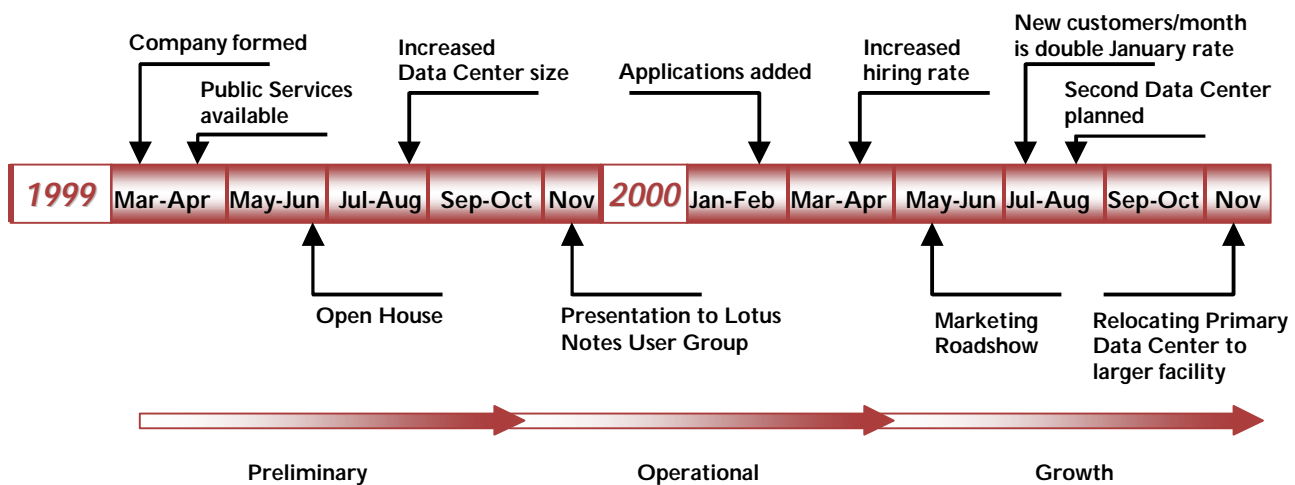


images are available to the users, the company is able to offer fractions of processor power and other infrastructure to those who have less demand on the systems. Each virtual system thinks that the processor is dedicated to it and not shared. The Domino Hosting Functions also track system use for management and systems analysis purposes.

By looking to the very large (15,000) group of Lotus Business Partners, coreFusion is able to bring applications on to their portfolio quickly. The business partner provides the support to install and get the first one running. For the business partner, this is a way to let small and medium business have the advantages that Enterprise Customers have.

coreFusion has been a leader in the implementation of Linux as an operating system on the Netfinity servers running Domino. coreFusion has been working directly with Lotus to assure that Domino Hosting Support is working on Linux. Linux, in this environment, is offering coreFusion a sound leading edge technology platform, fully Open Source supported. coreFusion is one of the first ASPs to be making such extensive use of Linux in this environment. "Lotus and IBM's commitment to Linux is important to coreFusion because it is important to our clients. Our clients are looking for a more reliable and secure operating system and they want their existing applications to run on it. Lotus and IBM are making that happen with Linux," said McPhedran.

### Timeline



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## **System Architecture**

coreFusion employs the Lotus ASP Solution Pack architecture. This allows coreFusion to offer applications for sale and rentable cycles on top of the Domino infrastructure.

The enabling environment is Lotus Hosting Management Structure (LHMS) which, when combined with Domino, offers an ASP environment. Functions include:

- Support for one-to-many application packages
- Shared Virtual Server
- Delegation of User Manager to ASP's customers
- ASP Back-end Billing System
- Customer Service Console

Within the e-business Application Portal normally provided by the ASP are WebSphere-based applications, Domino-based applications, Meeting Services (SameTime), Mail, Calendar and Scheduling (Domino), and Collaboration (QuickPlace). Optionally, Lotus supports the substitution of Exchange Mail Server for Domino and IIS for WebSphere.

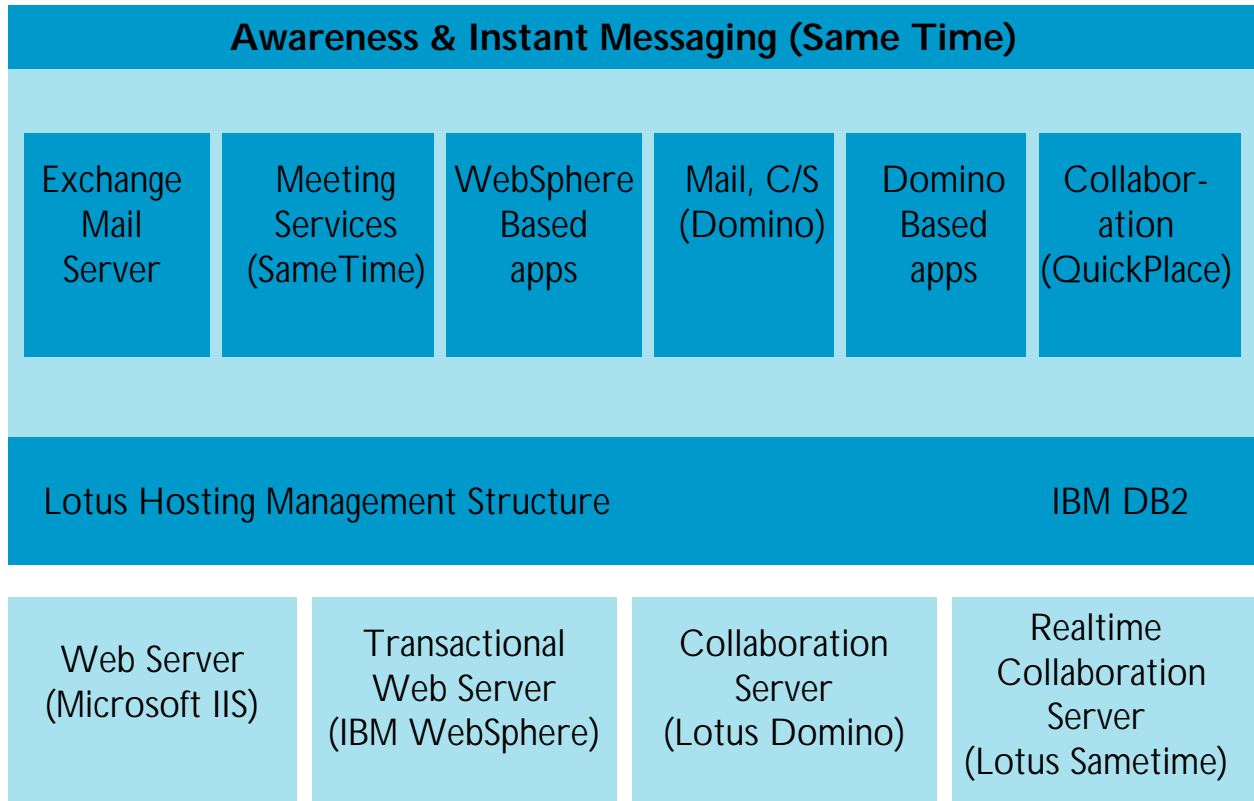
**Infrastructure:** The Systems Architecture consists of Netfinity Servers running both Linux and Windows NT 4.0, Cisco Routers, and multiple T1 connections, with additional facilities coming online this year.

**Applications Software:** Lotus Business Partners offer applications for customer relationship management and Lotus' own Learning Space provides the base for several courses available to coreFusion customers.

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# coreFusion System Architecture

## coreFusion Application Portal



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### **Business Results**

Growth has been steady; adding shared applications and customers simultaneously with a marketing campaign has begun to create synergy. McPhedran said, "Domino for Linux is a great choice for small companies or workgroups, especially when you combine it with an IBM Netfinity server. The operating system and the Application Server are tightly integrated and certified to run on the hardware, and the entire solution is supported by IBM Technical Support."

The number of new qualified leads has doubled in the past month and the president sees this as the beginning of serious growth. He is already looking for additional Data Center space for the primary Data Center in Toronto. His original plans called for that to be almost another year away.

### **Future Plans**

coreFusion started in Toronto and has most of its personnel there. It plans to open a facility near New York City in the near future.

The company has several hosted applications currently under development with business partners and "several others on the drawing board," said coreFusion's president, Pete McPhedran.

***"Domino for Linux is a great choice for small companies or workgroups."***

***-- Pete McPhedran  
coreFusion CEO***

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