IBM’s Unified Communications and Collaboration Strategy

Plugging Into Big Blue’s Big Bet on Eclipse and Lotus Sametime
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May 2007

This Report contains selected sections from a detailed report on IBM’s unified communications and collaboration strategy written by Wainhouse Research. The full report is available at www.wainhouse.com/ucreports.
Introduction

The big economic wins in this decade and the next will likely go to those organizations that can streamline the flow of knowledge and information throughout the enterprise. A new paradigm for real-time, ad-hoc global communications and collaboration called unified communications provides a framework for doing so. Unified communications systems bring together collaborative capabilities including presence, instant messaging, telephony, audio conferencing, web conferencing, unified messaging, mobility, and video conferencing through a simple and easy to use interface.

IBM was one of the first companies to create a premise-based unified communications system in Lotus Sametime, which rapidly gained prominence in the market, achieving more enterprise penetration than any other solution. The recent entry of Microsoft, and other heavyweights like Cisco, Nortel, Siemens, and Alcatel, indicates that unified communications is emerging as a focal point for the future revenues for some of the largest corporations in the world and that the market is poised for significant growth.

IBM knows that Microsoft is deadly serious about developing a premise-based unified communications platform designed to capitalize on the transition to IP telephony, software call control, premise-based audio and web conferencing, and the rise of video. IBM is countering with its own unified communications and collaboration strategy based on a new and open software version of IBM Lotus Sametime and Sametime companion products, Lotus Notes, Lotus Quickr, Lotus Connections, WebSphere Portal, and Lotus Domino, all based on open source Eclipse as the substrate.

In this report, we summarize the key elements in IBM's unified communications and collaboration (UC^2) strategy. We describe the strengths IBM Lotus has in the unified communications marketplace as well as its weaknesses. We share our opinion on Lotus Sametime's product strengths and discuss where it could be improved. We conclude with our assessment of IBM's chances for success in the unified communications market.

What Is Unified Communications?

For the purposes of this report, we define a unified communications system as a collaborative environment that includes elements of presence, instant messaging, telephony and/or audio conferencing, web or data collaboration, unified messaging (a
common message store for voicemail, email, and faxes), mobility, and/or video conferencing. Most of the unified communications functionalities mentioned above have all been in existence for some time; however, what we are seeing in the market is end user demand for communications unified wherein there is a common, intuitive, interface to all of these capabilities, with a corresponding integration of back-end infrastructure.

Before the emergence of unified communications, people were often required to decide in advance which communications modality they wished to use (voice, email, IM, web, or video) and separate communications channels for each were established. Typically, these could not be changed or augmented while a meeting was in progress. The new unified communications paradigm allows users to start with any communications modality they choose, and then add any or all other modalities as needed, seamlessly. Unified communications capabilities can also be integrated into nearly any business process or situation where human interaction or intervention is required.

A well-designed and implemented unified communications system should significantly reduce or eliminate multiple communications attempts in favor of more rapid, ad hoc, one-on-one and group meetings facilitated by presence, IM, voice, and conferencing capabilities. These systems will typically tightly integrate real-time media with collaborative services and any devices a person uses within the context of any workflow application.

We strongly believe that presence is a fundamental enabler for a unified communications system. Presence gives status information about any of the communications or workflow tools a person may use along with the person’s working context. For example, telephone status information (on-hook, in a call, in a conference call, etc.) adds significant information about how people are working, and it complements and enhances a user’s presence information based on calendar information, location services, or computer keyboard state. By knowing both device status and an individual’s context, people are able to reduce human latency and more effectively reach out and communicate with the other people in their particular value chain. We believe that presence will become the dial tone of the 21st century.
Companies are developing key measurements that help determine the effectiveness of a unified communications system. Some of these include

- The number of internal calls placed but not answered\(^2\). Many organizations believe an unanswered call is a failed communications attempt.
- The reduction in the volume of internal voice messages\(^3\).
- The decrease in the number of internal email messages.
- The increase in the voice traffic between employees.
- A drop in the number of scheduled meetings.
- An increase in audio conferences.
- An increase in web conferencing.
- How often third parties are brought ad hoc into a conference or meeting.
- Group effectiveness based upon revenue/employee and/or expenses/employee.

**IBM Lotus’ UC\(^2\) Strategy**

IBM Lotus has stated that its unified communications strategy and vision is to foster innovation and business agility by making it easier for people to find, reach and collaborate through a unified communications experience. The company does this by delivering an open and extensible software platform that integrates presence, IM, email, unified messaging, web, voice, video, telephony and business applications across multi-vendor environments.

When discussing unified communications, IBM attaches the phrase “and collaboration” to unified communications signifying that collaboration is a significant reason why we need to communicate in the first place. Thus for IBM Lotus, it is always Unified Communications and Collaboration or UC\(^2\)\(^\text{TM}\). IBM’s UC\(^2\) strategy, then, is to provide a unified communications and collaboration platform that embraces multi-vendor environments, provides a unified and ubiquitous client interface, and offers an open, extensible software model to promote an innovative partner and developer ecosystem.

**UC\(^2\) = Unified Communications & Collaboration**

A significant phrase in IBM’s UC\(^2\) vision is “extensible software platform”. IBM has gone to great lengths to make the latest version of Lotus Sametime, 7.5.X (and Lotus Notes
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8.0) highly extensible. It is built on the open source Eclipse platform and can be easily extended through customer-developed or third party plug-ins.

In addition to Lotus Sametime, IBM has other messaging and collaboration software including Lotus Notes for email and calendaring, WebSphere Portal for website and composite application portal development, Lotus Quickr for team workspaces, and Lotus Connections to provide a business-focused social computing platform to allow workers to take advantage of dynamic networks of co-workers, partners, and customers.

Although IBM Lotus has a rich portfolio of collaborative products, its UC² strategy moving forward focuses on Lotus Sametime as a key enabler. Consequently, the company has worked diligently to add critical functionality to Lotus Sametime including telephony integration and federation with public IM services.

The Sleeping Giant Awakens

IBM Lotus has the number one position in premise-based presence and instant messaging systems with approximately 17 million Lotus Sametime users worldwide. The company reports that of the customers that have installed Lotus Sametime, 98% - 99% of them actually use the product.

In the early part of this decade IBM Lotus seemed to lose focus on key patterns, developments, and trends that were occurring in the collaborative marketplace. Approximately two years ago, the company saw an inflection point in the market caused by the intersection of collaboration, which IBM Lotus was strong in, and communications, an area where IBM was weak.

Seeing this dynamic, the company refocused its efforts and resources, and the latest version of Lotus Sametime with its new GUI and telephony integration capabilities was developed. Although IBM Lotus was already working on unified communications prior to Microsoft releasing its Live Communications Server product, Microsoft’s entry into the market created a new sense of urgency.

Lotus Sametime has traditionally been pulled into accounts by IBM’s other software and services; IBM is now looking at Lotus Sametime’s collaboration and communication capabilities as a mechanism to create pull for its other products.

Competing with Microsoft

Unlike Microsoft, IBM has a huge global services organization. IBM believes that its services organization gives it a big advantage over Microsoft because many organizations wishing to implement a comprehensive, integrated unified communications strategy will want a highly qualified services group with a worldwide footprint to help them with the solution design and implementation.

IBM Lotus also believes its open software model used to develop Lotus Sametime will make it easy for others to monetize their own Lotus Sametime extensions and embedded applications. Thus, IBM has a vested interest in helping its partners succeed because they will help grow IBM’s own revenues. On the other hand, IBM sees Microsoft tending
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to compete against everyone else in the industry as Microsoft moves to incorporate its own unified messaging and IP PBX feature set into Office Communications Server. Microsoft consumes its partners while IBM will stand by them and help them succeed. By announcing many new capabilities before they are fully baked, IBM also believes Microsoft is attempting to freeze the market through FUD (fear, uncertainty, and doubt).

IBM Lotus intends to compete with Microsoft by out innovating Microsoft. It believes it can do this due to the open nature of its products – Lotus Sametime, Lotus Notes, and Lotus Connections – all built upon Eclipse’s open-source software platform as a foundation. The company also believes the open software model gives it a speed of development advantage over Microsoft, and that IBM Lotus will simply be able to out run Microsoft. Innovative partners will also have a speed advantage developing on the Lotus Sametime platform over those developing on Microsoft’s more proprietary platform.

The Lotus Sametime Partner Ecosystem

IBM has a broad vision for its UC² strategy, one this is bigger than IBM itself. A key component of this strategy is to foster the development of a vibrant partner ecosystem to enhance and extend the capabilities Lotus Sametime delivers on its own. IBM has clearly stated that it will continue developing the unified client, enterprise presence and IM, telephony integration, web conferencing, and a unified meeting environment. This leaves a wide world open to partner companies to develop complimentary capabilities for Lotus Sametime including IP telephony, unified messaging, audio conferencing integration, video conferencing integration, message hygiene, monitoring and management, process integration, and a whole host of other useful and novel functionality.

Some of IBM’s partners are small companies with thought and innovation leadership in a particular functional area; others are multinational giants with leading products in their own markets. A few will be in coopetition with IBM in that there is functional overlap between the partner’s products and Lotus Sametime. IBM has stated that it will not cannibalize its partners, as some of its competitors have.

Figure 5: A partial view of IBM Lotus Sametime’s collaborative partner ecosystem.

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The result is a collaborative ecosystem of strategic partners facilitating the creation of a flexible and extensible unified communications and collaboration environment. With these partners, Lotus Sametime enables individuals and groups to work together in real-time using multiple modalities in any location and using nearly any network-enabled device.

Our Analysis of IBM Lotus’ UC² Strategy

IBM Lotus has created a formidable enterprise collaboration solution. Alone, Lotus Sametime delivers computer presence and individual status, rich text instant messaging, encrypted messaging, point-to-point and multipoint IP voice and video, web conferencing, data sharing, white boarding, and federation between organizations. When coupled with Lotus Domino, Lotus Notes, WebSphere Portal, Lotus Quickr, and Lotus Connections, IBM provides complementary capabilities including directory services, authentication and authorization, email, calendaring, shared workspaces, social computing functionality, and a rich web development and portal environment. Combined with its partners’ capabilities, IBM has developed a very compelling communications ecosystem.

Fundamentally, we believe IBM’s unified communications and collaboration strategy, UC², is sound. IBM’s stated vision to “make it easier for people to find, reach and collaborate with individuals and groups” is in harmony with current global economic trends suggesting that streamlining the knowledge-chain in an organization will be the next source of significant value creation in the enterprise, much like supply chain optimization has generated significant value over the past two decades. Easy access to people, their talent, and experience base through Lotus Sametime as well as IBM Lotus’ other group and social computing tools will enable enterprise innovation and agility.

Building on an Open Platform

Making Lotus Sametime both an application and an open, extensible platform is a brilliant move for IBM. The ability for customers or third parties to extend easily Lotus Sametime’s presence, IM, web, voice, and video capabilities and/or to embed these features in other business applications across multi-operating system environments will bring big advantages for companies that adopt Lotus Sametime over more closed, competitive unified communications solutions. The fact that Lotus Notes, Lotus Quickr, Lotus Connections, and WebSphere Portal are all moving toward the same common Eclipse substrate that Lotus Sametime is built upon, and that applications built for one application will integrate with and play with all the others, makes IBM’s entire UC² strategy very compelling.
### The Strengths and Weaknesses

As a global player in the unified communications and collaboration market, IBM clearly has both corporate and product strengths; however, it also has some weaknesses. In the table below we touch on those are of particular importance to IBM’s UC² strategy.

<table>
<thead>
<tr>
<th>IBM’s Market Strengths</th>
<th>IBM has a stellar reputation, and it is well capitalized, both key characteristics that are required to compete and win in the looming marketing and product battles. The products are all software, which plays to IBM’s strengths in middleware development and services-oriented architecture expertise. The company also has a large global services organization that will give it significant advantage given the complexity unified communications entails and the need for organizations to really optimize workflows to achieve an ROI. IBM’s huge and loyal customer base is an immediate market for Lotus Sametime; given the market buzz about unified communications, Lotus Sametime will now be able to pull other IBM and Lotus products and services where Lotus Sametime was primarily a push before.</th>
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<tbody>
<tr>
<td>IBM’s Market Weaknesses</td>
<td>Our research shows that IBM Lotus has much smaller mindshare than Microsoft in the unified communications market and that it is presently at a significant disadvantage. We also believe IBM is not discussed in the public press and at events as much as some of its unified communications competitors are. Furthermore, IBM is not traditionally seen as a supplier to the SMB space, as it tends to go after the larger customer, which may limit the company’s reach.</td>
</tr>
<tr>
<td>Lotus Sametime’s Strengths</td>
<td>Lotus Sametime has rich functionality with a very intuitive interface. It has a significant advantage over other systems in terms of proven scalability with 25 deployments of over 100,000 users. We applaud Lotus Sametime for supporting multiple operating systems, which should allow its widespread adoption in the heterogeneous computing environments most enterprises have deployed. The ability to federate with public and other premise-based presence and IM servers is also a useful capability. Because Lotus Sametime (and other Lotus products) are built upon the Eclipse open source platform, we find the ability to extend Lotus Sametime with Eclipse plug-ins or to embed it within other applications very compelling. Although there are other web conferencing products that have more capabilities than Lotus Sametime, we believe that in the context of a unified communications solution, Lotus Sametime provides the capabilities an overwhelming majority of knowledge workers would find useful on a regular basis.</td>
</tr>
<tr>
<td>Lotus Sametime’s Weaknesses</td>
<td>A threat to IBM Lotus is that a significant number of Lotus Sametime users run on Microsoft Exchange; Microsoft will try hard to displace Lotus Sametime in favor of OCS 2007 in these deployments. The present release of Lotus Sametime cannot display telephony presence even when integrated with an enterprise telephony system. Telephony presence, and other kinds of rich presence, will be very important in the future, and we believe this capability must be added to Lotus Sametime. A few other changes we believe should be implemented include the ability to support builds, transitions, scaling, and shaded backgrounds in web conferences; the ability to connect Lotus Sametime’s IP audio and video to third party systems; and a rationalization of Lotus Sametime’s IP voice and video capabilities across the Connect client and the Meeting Room client.</td>
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Lotus Sametime Futures

IBM just launched Lotus Sametime version 7.5.1 which provides five new features:

- Point to point video,
- Tabbed chat (multiple chat sessions, one window with tabs for each session),
- Microsoft Office and Outlook integration,
- Linux Server support for the Lotus Sametime server, and
- Mac support to run Lotus Sametime Connect and Meeting Room clients.

Because some companies have expressed migration pain, Lotus Sametime 7.5.X was marketed as a dot release even though the user interface and product functionality were radically changed and improved. Furthermore, the underlying software was completely rewritten as Eclipse-based plug-ins.

So what is in store for future releases of Lotus Sametime? Certainly, Lotus Sametime will be enhanced with additional telephony integration capabilities. While it will not have PBX capabilities embedded within it, a more robust telephony interface is in the works. This is required to provide a sense of parity with Microsoft and, ultimately, to give Lotus Sametime users a rich environment for telephony control, regardless of which enterprise telephony system is deployed.

We believe Lotus Sametime will move to SIP-based audio and video to provide interoperability with SIP phones and video units. We are uncertain whether the underlying Virtual Places protocol will be discarded in favor of SIP/SIMPLE. We frankly do not see much advantage in changing this underlying protocol since most other vendors’ products are proprietary to some extent as well, unless IBM sees a need for greater standardization. Among IM providers, public and private, we are not seeing a rush to IM protocol standardization.

Another feature Lotus Sametime may add after looking at interfaces from Cisco and Microsoft is drag-and-drop communications capabilities. For example, with Cisco’s and Microsoft’s solutions, one can drag a person’s name to the telephone icon to launch a call. Similarly, to add a person to an IM session, phone call, or meeting, these interfaces allow one to simply drag the contact name to the window, and the person is automatically added. We like this style of interface and believe it could help Lotus Sametime remain current with its competition.

Probability of Success of IBM’s UC² Strategy

IBM Lotus has gone to great lengths to modernize and improve the capabilities and the look and feel of Lotus Sametime 7.5.X. While the company lost focus on unified communications in the early part of this decade, its focus on unified communications is now laser sharp, and IBM is redoubling its efforts in this market. Overall, we have found Lotus Sametime to be an excellent and robust unified communications product and platform. In addition, we are impressed with the broad collaboration vision taken by IBM, a vision that includes email, calendaring, presence and instant messaging, web conferencing, portals, content sharing, and social networking software – all independent but all sharing a common architecture.

IBM reports that Lotus Sametime deployments have increased markedly over the past 18 months; however, we believe that the company is going to have to stretch mightily to make its goal to have approximately 100 million Lotus Sametime users by the end of 2010. The company will have to step up its sales and marketing for Lotus Sametime and the other Lotus products significantly to achieve this goal. IBM is also going to have to
increase the size of its channel and provide its network of integrators and resellers with additional incentives to have them push Lotus Sametime rather than wait for Lotus Sametime to be pulled by other products.

IBM sometimes displays a slide in which it shows that
- There are over 25 companies with Lotus Sametime deployments of greater than 100,000 users,
- 27 out of the Global Fortune 50 use Lotus Sametime,
- 8 out the top 10 worldwide banks have implemented Lotus Sametime,
- 8 out of the top 10 U.S. pharmaceutical firms use Lotus Sametime, and
- 3 of 4 of the most profitable companies in the world have deployed Lotus Sametime.

The challenge for IBM will be in the small to medium business space; the challenge will not be with the very large multinationals. The problem with the Fortune 1000 is that there are only 1000 of them. Hence, we believe IBM Lotus will need to focus considerable attention on the SMB space and develop its channel to better penetrate this space where some of its competitors are strong. The company is addressing this issue through its IBM Lotus Express bundled offerings targeted at SMB, and we believe these packages, if they are very, very simple to use and maintain, will gain IBM a better share of the SMB business.

One other nagging issue is the importance of telephony presence and call control. Can these be decoupled as IBM and Cisco hope, or will they ultimately need to be tightly integrated, with PBX capabilities embedded in the unified communications system, as Microsoft believes. The market has not decided which approach will win out, and it is possible that both will thrive. Wainhouse Research strongly believes that presence is the dial tone of the 21st century and that IBM may need to watch carefully customer preferences in this area since PBXs will shortly be delivered as software on a CD. The point is that IBM may need to be prepared to switch telephony strategies and make a telephony softswitch native to Lotus Sametime if the market demands it. Partnering with Cisco and others can help if the Lotus Sametime architecture is crafted so that any standards-based PBX engine can be inserted as a module within Lotus Sametime.

We have no question that IBM Lotus technology is world class, but the company will have to execute very well to out run and out innovate Microsoft. The financial rewards are evident and great. IBM has positioned good people to run the IBM Lotus division and its unified communications group. The proof will ultimately be in the share and revenue IBM Lotus, its global services division, and its partners achieve as the emerging unified communications market grows and matures.
## Predictions

<table>
<thead>
<tr>
<th>Assertion</th>
<th>Probability of Being True in 2 Years</th>
<th>Probability of Being True in 5 Years</th>
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<tbody>
<tr>
<td>IBM will achieve 100 million Lotus Sametime users</td>
<td>20%</td>
<td>50%</td>
</tr>
<tr>
<td>Microsoft will have 100 million OCS users with telephony capability</td>
<td>20%</td>
<td>60%</td>
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<tr>
<td>IBM will remain the market leader for the number of paid licenses and ...</td>
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<td>50%</td>
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<tr>
<td>IBM Lotus Sametime will have the largest single enterprise ...</td>
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<tr>
<td>IBM Lotus will add telephony softswitch capabilities to Lotus Sametime</td>
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<td>40%</td>
</tr>
<tr>
<td>IBM and Cisco will fully merge unified their ...</td>
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<tr>
<td>Lotus Sametime will embrace SIP for audio and video</td>
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<td>75%</td>
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<tr>
<td>Nortel will cede softswitch development to Microsoft while maintaining ...</td>
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<td>50%</td>
</tr>
<tr>
<td>IBM will be #1 or #2 in the unified communications market</td>
<td>95%</td>
<td>85%</td>
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</tbody>
</table>

*Table 1: Predictions about IBM, Microsoft, and the unified communications industry.*
About the Author

E. Brent Kelly is a Senior Analyst and Partner at Wainhouse Research specializing in unified communications applications and enabling infrastructure. Brent has authored numerous reports and articles on unified communications including Telephony-Based Unified Communications, Avaya’s Unified Communications Strategy, Microsoft’s Presence-Enabled Real-Time Communications Strategy, and Cisco and the Battle for the Enterprise Collaboration Desktop. He has also written reports on migrating to migrating to IP communications, video network service providers, and the collaborative reseller channel. Dr. Kelly has authored articles for Business Communications Review Magazine and taught workshops at major industry events including VoiceCon. Brent specializes in capturing the key elements of technical ideas and concepts and then shares them in word and graphical form so that end users and technical decision makers can understand them.

With over 20 years experience in developing and marketing highly technical products, Brent has served as an executive in a manufacturing firm where he developed and implemented a manufacturing, marketing, and channel strategy that helped land national accounts at major retailers. Previously, he was part of the team that built the devices Intel used to test their Pentium microprocessors. He has also led teams developing real-time data acquisition and control systems and adaptive intelligent design systems for Schlumberger. Brent has worked for several other multinational companies including Conoco (now DuPont) and Monsanto. Mr. Kelly has a Ph.D. in chemical engineering from Texas A&M and a B.S. in chemical engineering from Brigham Young University. He can be reached at bkelly@wainhouse.com.

Endnotes

1 Communications Unified is a term used in the article: Burton, Jim; Parker, Marty; Pleasant, Blair, and Van Doren, Don; “What is Unified Communications – and Why Should You Care?”, Business Communications Review, August 2006, p. 16.
2 This can metric can also include internal calls made to or from an individual’s mobile phone because some PBX manufacturers have developed mobile device support within their PBXs.
3 IBM reports that the number of internal voice messages has been reduced to almost zero. Wainhouse Research has similar use experience where internal voice messaging is effectively non-existent.
4 This graphic listing IBM partners is current as of 14 March, 2007. Note that it does not show all IBM Lotus Sametime partners.