

“Linc-ing” the Enterprise: Web Conferencing Completes the Puzzle

iLinc Communications

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Web Conferencing – Driving Today’s Enterprise

Web conferencing is reshaping the way businesses interact. While email and traditional voice conferencing remain an effective piece in the enterprise communications puzzle, web conferencing has added a virtual element that has been extremely effective in linking disperse work groups and bridging gaps formed by text-based and voice-only communication. Delivering a “virtual conference room environment” for its users, web conferencing is opening new avenues for businesses to interact in one-to-many and small workgroup settings.

The core benefit of web conferencing is it’s ability to share data in real-time. Whether broadcasting a presentation to hundreds of conference attendees or collaborating on a single document with another co-worker, this technology enables enterprises worldwide to easily disperse information directly from the desktop. As such, many organizations incorporate web conferencing into a number of their communication practices beyond the typical meeting format.

Training sessions, customer relationship management (CRM), business planning, sales and marketing efforts, and project management activities are quickly becoming streamlined processes for many businesses through the use of web conferencing. The versatile and flexible nature of this technology has made it an effective tool for a wide range of job duties - from high-level executives to the average office worker.

Many of the primary functions included in a web conferencing solution include presentation sharing, application sharing, chat, polling, and reporting. While the average solution includes a number of features to enhance each of these functions, the fundamental premise of sharing information in real-time remains the key to its value.

Over the last three years, the web conferencing industry has experienced incredible growth as awareness of this technology becomes increasingly widespread. Once viewed primarily as a replacement to business travel, web conferencing is permeating the business communications structure and meeting needs in instances where travel may have never been an option.

Such rapid growth, however, has surfaced many issues including data integrity, system reliability and, perhaps most importantly: security. As web conferencing is increasingly used for highly confidential communications, particularly in industries such as financial services and technology, the need for highly secure solutions becomes paramount.

For the most part, web conferencing is a viral technology, relying on word-of-mouth as its primary method of advertising and awareness building. In fact, a large percentage of web conferencing adopters were introduced to the technology as a meeting participant, owing to its inherent presentation and collaboration value.

As web conferencing continues its rapid growth, a flood of new vendors and offerings are entering the marketplace to capitalize, thus ensuing demand increases. As new offerings emerge and new vendors enter the space, issues such as security arise, making buying decisions more cumbersome.

Major Communication Challenges in the Enterprise

As the enterprise environment continues to evolve, countless organizations worldwide are faced with a number of barriers to effective communication. Among these challenges are:

- Managing the disperse enterprise
- Linking geographically disperse workgroups
- Managing remote/outsourced staff
- Business continuity
- Distribution of information
- Ensuring secure communications

Managing the disperse enterprise is increasingly difficult as corporate expansion progresses. In addition, a number of organizations are developing tele-worker programs, allowing employees to work from a home office environment. As expansion initiatives continue and the number of telecommuters within the enterprise increases, businesses are progressively faced with more obstructions to efficient information dispersal.

Similarly, linking geographically disperse workgroups and project teams adds an additional element to “getting the job done”. While email and audio conferencing provide an avenue for

communicating with distant and local co-workers, these methods lack the ability to effectively share information in a real-time, ad-hoc format. In an asynchronous environment employees often find it is difficult to gain quick resolutions to problems and empowerment to make quick decisions, thus adding to “down-times” and extending project completion.

Ultimately, these factors impact the level of continuity in today’s business environment. Not merely in the ability to meet in workgroups, but also in the frequency and regularity in which organizations are able to share information enterprise-wide. While company-wide email distribution enables sending information to numerous employees, within text communications, many times it is difficult for readers to sense proper tone and overall message that may get hidden within lengthy emails or email chains, thus leading to confusion and loss of urgency. This issue becomes even more complex in an increasingly dynamic and fast-paced workplace, particularly in crisis management and disaster recovery situations.

Web conferencing takes on the challenges presented in today’s workplace by delivering an ad-hoc, real-time communications environment while providing the flexibility of sharing presentations, applications, and users’ desktops.

The Missing Piece of the Communications Puzzle

Audio conferencing is a core component of multi-point communications inside and outside of the enterprise. By allowing numerous parties to meet on a single audio bridge, audio conferencing is being adopted by companies of all sizes, both large and small, for routine 3-party calls and larger company-wide broadcasts.

While an effective method for connecting multiple parties, audio conferencing does lack many of the necessary components of having an “as good as being there” environment. Among the primary pieces missing in today’s audio environment is the ability to share data or information to conference attendees. Currently, many audio conferences begin by emailing a PowerPoint presentation or document to all conferencing participants for use as a discussion tool within the conference. Conference attendees are then required to open the spreadsheet or presentation from their email and navigate through on their own as the conversation progresses. Many times questions such as, “what slide are we on?” or “ which cell are you

in?” will arise in these conferences as meeting participants get off-track or do not stay engaged in the discussion. Additionally, in these situations, participants tend to “jump ahead” in presentations. This can become very frustrating to both sides in the conversation and ultimately builds a communications barrier between conference participants, thus limiting its effectiveness.

Within a web conferencing environment these communication barriers are minimized, as it enables all meeting participants to jointly view a specific presentation, collaborate on a document, or visit a web page together in real-time. The moderator has full control over advancing through slides, document navigation and edits, as well as, pointing meeting participants to specific websites. However, in order to create more of an interactive session, the moderator may relinquish control of the conference to meeting attendees, thus “handing the baton” to the appropriate parties in the session so that they may lead the discussion.

Since the only tools necessary to enter a web conference are a web browser and Internet connection, there are few barriers to launching and joining an online meeting. With the addition of audio conferencing, web conferencing enables co-workers or work groups to sit together as though they were in the same room, whether they are thousands of miles away or merely a few cubicles apart. By minimizing the need for corporate travel and lengthy email chains, web conferencing encourages quick decision-making and information sharing, thus empowering workers to achieve a higher level of productivity.

As enterprises of varying sizes and business models incorporate web conferencing, the uses and application integration appear to have no boundaries. Frost & Sullivan expects that web conferencing can provide tremendous value in virtually any enterprise setting, particularly the following:

- **Financial** corporations for internal meetings, group training, client consultations, customer briefings, and investment workshops
- **Professional services** companies for client meetings, customer briefings, project consultations, analyst broadcasts, task development, and project creation
- **High technology** companies for sales presentations, product demonstrations, CRM and customer service: Help Desk solutions for managing overseas staffing, product training, and research and development

- **Education** institutions for instructor-student interaction, student work shops, project teams, class content development and delivery, and internal meetings
- **Healthcare and pharmaceutical** organizations for research and development, sales presentations, product training, marketing, and promotions

Who is iLinc?

As a flood of new providers and offerings enter the web conferencing marketplace, finding the ideal solution to enable emerging enterprise communication needs can be a cumbersome process.

There are a wide array of solution and delivery options available to end-users including software and hosted solutions, feature-rich and “vanilla” solutions, as well as those geared for specific vertical applications such as CRM and corporate/classroom training, and those developed specifically for the corporate meeting environment. With so many solution options, end users can become overwhelmed when trying to decide on the right web conferencing vendor or solution.

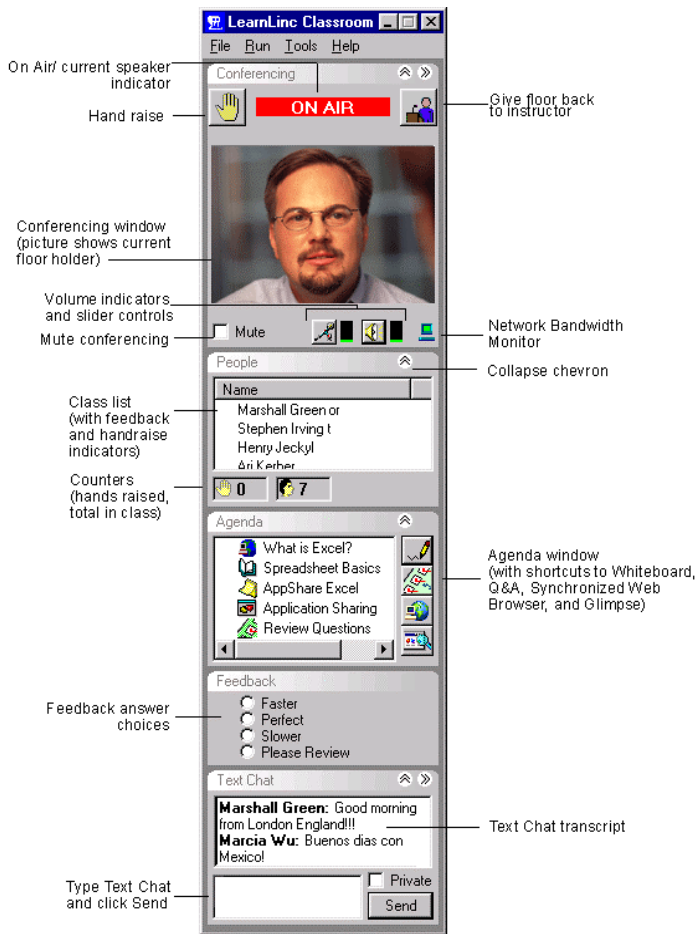
In 2003, iLinc (formerly EDT Learning) introduced its new product suite to the enterprise marketplace, fulfilling its vision of delivering a package of services and software that facilitate common business collaboration via the Internet. iLinc’s history in the collaboration and training industry dates back to 1998, when it provided web-based information systems and training to the large enterprise. Several corporate and technology acquisitions later, it acquired LearnLinc from Mentergy to expand its product line and incorporate a live-meeting environment with virtual classroom software. Among the first TCP/IP-based virtual classroom solutions, LearnLinc has utilized desktop audio/video conferencing and data sharing since 1994.

Understanding enterprise needs for a straight-forward, flexible meeting environment iLinc offers end users a wide variety of meeting and delivery options, all bundled within its suite of solutions. iLinc’s core applications provide a specific set of vertical applications and features based on the user’s communication needs, including:

- **MeetingLinc** - For smaller collaborative settings, MeetingLinc facilitates document sharing, presentation sharing, application sharing, and voice-over-IP amongst meeting participants in a one-to-few environment.
- **LearnLinc** – Best in a learning environment, LearnLinc enables students and instructors to collaborate utilizing features such as courseware and class creation, enrollment, add/edit agenda items, as well as, delivering live instruction and content using voice-over-IP, desktop videoconferencing, and interactive multimedia.
- **ConferenceLinc** – For one-to-many environments, ConferenceLinc enables conference presenters to share presentation content, gather audience feedback through polling features, live chat, and question and answer sets in a hosted, professionally managed group setting, or virtual auditorium.
- **SupportLinc** – For the service and support environment, SupportLinc allows technical and customer support personnel to provide hands-on support for product, systems, and software applications, as well as, managing in-coming and outbound call volumes.

While iLinc offers many choices for the end user in terms of application specific solutions, each application is launched and managed directly from the iLinc Communications Center, eliminating necessity for multiple launch points. By offering each application within the iLinc Communications Center, users are able to go to a specific URL or link and manage all of their meetings, whether they are using one or multiple applications.

Despite varying degrees of features and functionality, each iLinc solution has the same “look and feel”, minimizing confusion when users switch between applications. Each application within iLinc is managed and controlled from the meeting console. Located on the left hand side of the screen, the console provides all of the features and tools necessary to:



- Share a presentation, application, website, or whiteboard
- Raise hand and ask questions
- View meeting attendees and meeting agenda
- Chat with meeting attendees (both public and private)
- Stream video or view a still photo
- Engage in VoIP with meeting participants
- Obtain and view feedback from meeting attendees
- Perform question and answer sessions
- Relinquish meeting control to conference attendees

Once Users Have Decided to Adopt

As enterprises adopt a web conferencing solution, they must first investigate which method of deployment best fulfills their needs – hosted services or in-house software deployment. It is first important to understand the advantages and disadvantages to each deployment option, as outlined in the chart below.

	Service Model	Software Model
Advantages	<ul style="list-style-type: none"> • Pay-per-Use • Enables company's to use multiple solutions • Available on any remote PC • Limited obligation on IT resources 	<ul style="list-style-type: none"> • Long-term ROI benefits • Greater level of security • Further integration with other enterprise applications • Greater level of consistency throughout enterprise
Disadvantages	<ul style="list-style-type: none"> • Greater security risk • Overage charges if usage exceeds volume agreements • Less long-term ROI benefits • Expensive if used frequently 	<ul style="list-style-type: none"> • Larger initial investment than service • Requires support from internal IT staff • Higher requirements for internal infrastructure

A hosted web conferencing service model delivers numerous advantages to new users of web conferencing. Since it provides a high level of flexibility associated with use and cost of service, many new users of web conferencing have found a hosted model to be a good fit with their initial web conferencing needs. Additionally, hosted solutions typically require minimal installations and maintenance, thus assisting those organizations that may lack sufficient IT personnel, hardware, and network resources. However, there are fewer long-term ROI benefits associated with use of a hosted web conferencing service. Overage charges for exceeding volume or port agreements and recurring monthly charges quickly add up to the cost of deploying a web conferencing solution in-house, while also offering limited ability for the enterprise to predict or budget what monthly service fees will cost.

Frost & Sullivan research has found that new users of web conferencing use it infrequently, and, when they do, it is mostly in a presentation sharing environment. This limited usage stems primarily from uncertainty that most users have when initially utilizing web conferencing. However, research has also shown that enterprise usage quickly heightens as doubts of ease-of-use minimize and awareness of web conferencing becomes far-reaching within the enterprise. Similarly, usage of web conferencing will extend beyond the presentation sharing environment, as the collaborative functions of web conferencing become integrated into routine business communications. Once usage levels escalate, enterprises utilizing a pay-per-use price structure find that monthly service costs rise substantially and

that hosted web conferencing becomes a rather costly communications solution. Many service providers today offer a subscription-based service, but the overage charges for exceeding volume or port requirements can lead to steep increases in what may be perceived as a fixed monthly cost.

Like the service model, the software deployment model offers many advantages for users of web conferencing. With high volume enterprises finding the most value from software deployment, web conferencing software can deliver significant long-term ROI advantages over a hosted solution, particularly when deployed company-wide. Although requiring larger up-front costs, an enterprise that frequently utilizes web conferencing company-wide, can begin realizing ROI in matter of months when adopting an in-house web conferencing solution under a perpetual license price structure.

In addition to these ROI benefits, web conferencing software also creates a secure, behind-the-firewall, web conferencing environment. Eliminating the need to upload presentations or meeting documents to an “outside server”, web conferencing software provides MIS and IT departments with a greater level of control and management of what data that is transferred outside the enterprise.

Often, web conferencing solutions are purchased at a departmental-level within the enterprise. This is due in large part to the limited interactions that company IT and MIS departments have in the web conferencing adoption decision process. As a result, organizations may be utilizing multiple web conferencing service solutions, thus limiting the level of communication standardization throughout the enterprise. In addition to receiving monthly service costs from multiple carriers, it can create confusion when engaging in company-wide meetings or department-to-department conferences.

When web conferencing software is managed by internal IT and MIS personnel, there is a greater level of control over which employees have access to the web conferencing solution, whether it is rolled out company-wide or only to select individuals. Additionally, there is the ability to block or limit the available features given to each user, to ensure compliance to company communication policies and security requirements. This enables web conferencing to truly become an enterprise communications standard, limiting the confusion of “what

solution or provider is used in what instance”, and making collaborative communications more concise and streamlined across throughout the company.

How Does iLinc Benefit the Enterprise?

iLinc provides end users with both hosted and software deployment options, thus providing maximum flexibility in terms of application use and deployment. Catering to the needs of both experienced and new users, as well as, companies with limited financial resources, iLinc’s flexible deployment models enable its users to evolve as their needs and available resources for web conferencing expand.

Frost & Sullivan has reviewed the deployment options of iLinc, how iLinc meets the communication needs present in today’s enterprise environment, as well as, evaluating the strengths and weaknesses of the solution. Frost & Sullivan’s research on the web conferencing industry and its users, has also enabled it to identify several opportunities for iLinc and its users as a real-time collaboration tool.

iLinc offers numerous advantages to operate and communicate in the virtual conference room setting. Among its most lucrative capabilities are the numerous vertical applications that iLinc delivers. By catering to the communication needs of its users, iLinc delivers a custom meeting environment for both large and small meetings, technical and customer support, and the virtual classroom setting. Since the needs within each one of these business practices can differ greatly depending on the task at hand, having multiple application choices provides a greater level of efficiency and effectiveness, over what a single, “one size fits all” solution can provide.

Additionally, Frost & Sullivan has identified the following features as stand-out features and functions or key differentiators of the iLinc solution:

- Application and desktop sharing – Allowing multiple parties to collaborate in real-time on a specific document or share items on the presenter’s desktop
- Whiteboarding – Providing conference attendees the ability to draw or develop an interactive virtual whiteboard.

- Annotation tools – Empowering the conference presenter and meeting attendees to stress specific points within a presentation or document sharing session
- Desktop videoconferencing – Delivering a true “virtual conference room environment”, and adding the “look and feel” of a face-to-face meeting. iLinc also provides the ability to add a still photo in order to save bandwidth where limited.
- Voice-over-IP – Enabling enterprises to dramatically save on audio conferencing and telecommunication costs.
- Text chat – Offering both public and private chat, this feature enables conference participants to communicate without interrupting the audio portion of the meeting.
- Split screen application sharing – A leader can display their copy of an application in the top half of the screen, while students can follow, controlling their own local copies in the bottom half.
- Ability to share multiple applications - Providing users the ability to open two applications within the sharing window in order to collaborate on two separate documents or web pages at the same time
- Individual content navigation – Allowing meeting participants to advance slides during presentations or navigate web pages on their own, and re-synchronizing on the meeting presenter’s command.
- Participant interaction meter - Enabling the instructor to gauge the interaction level of each meeting attendee, whether they are fully engaged or “not paying attention” to the meeting content.
- Screen snapshots – Providing the instructor with the ability to take a snapshot of a student’s screen to ensure they are staying engaged in the presentation content
- iLinc Communications Center – Enabling iLinc users to launch, manage, schedule, or edit meetings across all vertical applications from the same location
- Chevron button – Permitting meeting attendees to expand individual windows such as text chat, video streaming, meeting agenda, participant window, and/or participant feedback.
- Meeting Console – Delivering a consistent look and feel across all vertical applications, the meeting console provides meeting attendees and conference presenters with all of the necessary meeting tools and features without interference in the sharing window.

- Meeting Materials – Enabling meeting presenters to provide an advanced set of meeting materials for conference attendees to view before, after, or as an alternative to joining the meeting.

Additionally, iLinc has several technology features that provide enterprises with flexibility and ease in deploying web conferencing throughout the organization, such as:

- SSL and AES encryption: In March 2004, iLinc deployed conferencing solution security that provides both SSL and AES encryption in both an ASP and an "inside the firewall" solution. The combination provides for "true" end-to-end encryption as data remains undecipherable even as it passes over networks and through servers.
- Remote Join: Users can go directly into live sessions from a URL, allowing them to bypass iLinc's "front door" completely. Users and sessions can be created "on the fly." Remote join allows organizations to rely on their existing front-end authentication, administration and management systems.
- .LRN documentation: The iLinc API enables .LRN documentation, text-based files that contain all of the session details required to launch client sessions. Thus, any system that can generate them can be used as the "front end."
- Network Impact Optimization: iLinc's server cascading allows IT staffs to place distributed conferencing servers at key locations on their Intranet in order to reduce bandwidth utilization. The product is also designed for minimal bandwidth, enabling clear and consistent connections for even 28K modems.
- Implementation: iLinc client technology does not rely on third party plug-ins, thus avoiding large downloads, JVM version problems, performance limitations, and security issues that may be inherent to some Java-based solutions. Rather, it uses non-invasive, C++ technologies that provide reliability and performance, and that work even in secure lock-down environments.

Combined, all of these features and functionalities provide iLinc with a level of differentiation when compared to the offerings of its competitors. The core value proposition of

incorporating iLinc into the enterprise environment lies in its ability to meet communication needs across a variety of enterprise applications, in addition to its ability to provide the full virtual conference room meeting environment.

Currently, one of the primary barriers for growth of iLinc is its minimal level of brand awareness as a player in the web conferencing industry. Currently, the web conferencing market is dominated by a handful of vendors offering web conferencing solutions, backed by strong brand name recognition and marketing budgets. In time, Frost & Sullivan expects that iLinc will establish a greater brand name for itself. As mentioned earlier, web conferencing awareness, in large part, spreads virally. As enterprises increasingly adopt iLinc into the communications structure and its use expands outside of the enterprise, the awareness of its benefits and brand will likely increase.

The features of iLinc provide a very solid foundation for enterprise collaboration. Since this solution is still in the early stages of its lifecycle, there is room for growth in terms of features and quality of the offering. While VoIP and video streaming features can be viewed as benefits of the offering, these features must be scheduled prior to meeting launch, instead of allowing the presenter to immediately begin sharing video or IP audio. In a sense this limits some of the ad-hoc capabilities of the offering. In addition, it allows only one-way video streaming, rather than multi-point videoconferencing where both conference moderators and meeting participants are able to see one another simultaneously. Increasingly, this is becoming an important feature set in meetings of a true collaborative nature. However, if this feature causes a distraction for meeting participants or there are bandwidth limitations, there is the ability to provide a still image.

Currently, the level of integration that iLinc provides with enterprise software and communication applications are diminished when compared to other well-known web conferencing solutions. As such, Frost & Sullivan recommends that future releases of iLinc offer deeper levels of integration with Microsoft Outlook and Lotus Notes, enterprise calendaring functions, and traditional PSTN audio conferencing. Lastly, iLinc does not enable the meeting presenter to deliver a presentation in full-screen mode, a valuable feature in large-scale presentation broadcasts and one-to-many presentation settings.

However, when weighing the strengths and weaknesses of the iLinc offering, Frost & Sullivan finds tremendous value associated with the capabilities of iLinc in the enterprise setting and expects that iLinc users will find great value in this enterprise communications tool to enhance productivity and efficiency in the workplace.

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