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COMMUNICATIONS

Web Conferencing Software and
Audio Conferencing Solutions

Government Agencies Seek Secure, High-Performance Web Collaboration

How to Manage the Risks and Opportunities of Networked Conferencing, Meetings and Training

Government agencies are under pressure to communicate and collaborate in a rapid, productive, and cost effective way. Recognizing the power of today's communication technologies to help them cross geographic boundaries and take action in real-time, they see Web-based collaboration as a clear and compelling solution.

However, new security mandates, regulatory statutes, technical requirements, and other factors have limited the field of options now available to decision makers. Some top federal agencies have even begun cancelling contracts and abandoning Web conferencing systems that are difficult to implement or don't meet increasingly stringent security requirements. Indeed, the costs and consequences of making a poor decision on a collaboration solution are becoming vividly clear to some government executives.

To avoid the hassles and hazards that some agency leaders are now facing, it is critical to consider upfront the key factors now influencing decisions on collaboration solutions – and make reasoned judgments about how these demands are likely to change in coming years. Security concerns, for instance, are likely to become more prominent as thorny issues are raised about the vulnerabilities of hosted conferencing solutions or the origin of underlying code development.

Successful navigation of today's Web collaboration challenges will require decision-makers to clearly assess the opportunities and risks around potential solutions. They will need an enterprise collaboration suite that addresses their requirements for operational performance, control and security, ease of implementation, and scalability over time.

Market Drivers: Trends Driving Change

Several factors are now influencing the technology decisions of governmental organizations with respect to communication, collaboration, support, and training. They include security mandates, regulatory statutes, and preparedness and telework initiatives.

- **Security mandates limit conferencing options.** Some government agencies recently have issued information technology (IT) mandates demanding that stringent security requirements be met. With respect to Web collaboration, some agencies have issued a ban on externally hosted solutions due to concerns about compromised network and server security. These agencies now require their IT groups to ensure conferencing solutions are implemented on government servers and delivered using private networks. In addition, some agencies have made strict demands concerning the origins of platform code development. In some cases, agencies have been unwilling to implement software that is not wholly developed within the United States. While such mandates have not been uniformly implemented across all agencies, they do raise concerns throughout the entire federal government about the trajectory of security requirements in the coming years. The wrong decision can mean failed IT implementations and squandered investments.

- **Regulatory statutes create compliance challenges.** Federal laws and regulatory statutes have created new demands in recent years on organizations exploring Web collaboration solutions. The Federal Information Security Management Act (FISMA) requires oversight and governance of information security within U.S. government agencies. Based on security evaluations of two dozen agencies, the Committee on Government Reform annually issues the Federal Computer Security Report Card. Another relevant statute is Section 508 of the U.S. Rehabilitation Act. It requires that federal agencies' electronic and information technology must be accessible to people with disabilities. Such regulations have put pressure on IT decision-makers to ensure their systems are compliant. If compliance requirements go unmet, funding can be withdrawn.

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[1]Herbert Strauss, Gartner research report, "Why IT Projects Fail in Government," November 2006.

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- **Preparedness and telework initiatives place growing emphasis on virtual communication.** Recognizing the need to geographically distribute work for productivity and disaster preparedness purposes, the federal government has begun to explore new approaches to telework and virtual communication. The Office of Personnel Management (OPM) is developing a legislative proposal that would require agencies to authorize offsite telework in the case of a pandemic health crisis, disaster, or attack. The OPM's Telework/COOP mandates are designed to ensure government agencies are prepared to maintain "continuity of operations" should such scenarios arise. However, they also represent an opportunity to enhance employee productivity and recruitment by increasingly decoupling the work from the worksite. The fiscal 2007 Science-State-Justice-Commerce spending measure even requires agencies to develop strategies enabling more workers to telecommute – or risk losing as much as $5 million in appropriations for non-compliance.

Clearly, governmental leaders are looking for new ways to enhance collaboration, information sharing, and decision-making. They need to strengthen intra- and inter-agency communications. They need to address the needs of both war-fighters and first responders. In the shadow of 9/11 and in the face of a War on Terror, they know they must be prepared. With past disasters like Hurricane Katrina and looming threats such as the Avian Flu, they know they must be responsive.

The Trouble with Many of Today's Web Collaboration Solutions

Given today's demands for compelling and cost-effective solutions to support collaboration, one would think that government decision-makers would be quick to adopt Web conferencing solutions. Unfortunately, some agency decision makers are now living with the consequences associated with difficult implementations, inadequate scale, system inflexibility, or an inability to conform to growing security requirements. Consider these challenges linked to many of today's conferencing and collaboration solutions:

They lack control and adequate security. The problem with many solutions on the market today, particularly hosted ones, is that they lack the capabilities to adequately control the conferencing environment. There is no direct control over who can join a meeting or observe it. This is an especially troubling issue when classified information is being exchanged or discussed.

And while some service providers claim that no information is "persistently stored" on their servers without the client's request, the bottom line is that meetings are conducted on external networks and stored on external servers. There is no adequate way to ensure the information is secure from unauthorized access and use.

In addition, some agencies have been forced to cancel contracts or remove software when the underlying code was not fully developed in the United States. Given the sensitive nature of their communications activities, some agencies are simply unwilling to risk the introduction of "backdoors" and other security threats that possibly could be introduced when platform code is developed offshore.

As government organizations implement service-oriented architectures, they are seeking ways to flexibly accomplish more with less. They want systems that can scale up (or down) to meet changing demands and requirements.

Finally, control means being able to install and operate the system without continuous help desk support. Many systems require users to download various software plug-ins – a problematic issue that introduces new security risks and can overburden support staff.

They lack flexibility. One key aspect of flexibility is having the ability to integrate the collaboration applications with other applications such as authentication, instant messaging, and email systems. Several agencies have been hobbled by the costs and complexities of integrating stand-alone conferencing systems with the rest of their infrastructure. Success revolves around having a solution that is flexible enough to enable rapid and simple integration.

Strong IT integration, in fact, is a key factor in IT consolidation efforts – a vital step in the strategic advancement of IT and the delivery of greater business value. As Gartner states, "Moving from highly fragmented — and often unnecessarily expensive — IT operations to a more consolidated organization at the enterprise level has the potential to save a great deal of money, improve the capability of IT, and help minimize security and business continuity risks."3

Another factor that has become a problem with some conferencing systems is inflexibility around the management of bandwidth. When voice, video, and data are all going over networks, it's important to be able to flexibly manage bandwidth requirements and allowances all the way down to the individual user level.

They lack ease of implementation. The success of a new application is largely affected by the success of its implementation. Too many organizations have experienced disappointing results due to deployment problems. Government agencies are no exception. They have seen collaboration

and conferencing projects fail when implementation proved too complex – and technical inadequacies in a given product were revealed.

Considering that government IT investments are linked to a contract vehicle, there is little margin for error with respect to implementation and integration. Projects that drag on unexpectedly can lead to spectacular failures. Government IT decision-makers seek solutions that are easy to deploy. Solutions that require significant implementation, integration, or hardware expenses are the ones most likely to disappoint.

They lack scalability. As government organizations implement service-oriented architectures, they are seeking ways to flexibly accomplish more with less. They want systems that can scale up (or down) to meet changing demands and requirements. Should a crisis occur, IT managers may suddenly find it necessary to provision hundreds – or even thousands – of offsite workers. They need systems that enable them to prepare for such scenarios. Even without crisis scenarios, it is likely that agency demands for Web-based conferencing will only grow in the coming years. Some experts predict that as much as 30% of the government workforce could work remotely within five years. Whatever the case, government agencies must invest in systems now that are capable of expanding to meet growing demands. Unfortunately, some agencies already are discovering that their existing systems are inadequate for their current demands.

Success Criteria: What to Look for in a Solution

Government organizations considering an investment in Web conferencing and collaboration solutions should consider the criteria now guiding many of their peers.

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- **Deployment options.** Considering the escalating security requirements on IT, government agencies increasingly need to keep sensitive information on their own networks and servers. In other cases, agencies prefer the limited obligations on IT resources associated with hosted solutions. What is ideal is the option of doing one or the other – or both through a blended model.

- **Advanced encryption methods.** In terms of encryption, one should require the most advanced methods (SSL, AES, etc.) approved by government standards bodies.

- **On-shore development.** Given the heightened demands associated with sensitive IT products, government decision makers can best manage their risks by deploying conferencing systems where 100% of the platform code is developed and supported in U.S.

- **Compliance with key standards.** One should seek solutions that are compliant with or enable compliance with key standards, legislation, and regulatory statutes. Whether the issue is FISMA, Section 508, new mandates around telecommuting and preparedness or relevant security standards, one should ensure collaboration solutions further strengthen agency compliance.

- **Flexibility.** Require an open API structure for ease of integration with other applications. Also, look for the ability to "throttle" bandwidth to accommodate network needs.

- **Full CONUS support.** Solution providers should be expected to provide highly qualified, domestic support to employees within the United States. Customers need the right support at the right time as opposed to offshored support technicians who have little familiarity with the particular application.

- **Pricing options.** While some solution providers only allow their customers to "rent" their software through subscriptions, many organizations can realize the highest return on investment and lowest total cost of ownership by purchasing their software licenses. Web conferencing software vendors should offer this option.

The Solution: iLinc's Enterprise Collaboration Suite

One company that has concentrated on addressing the challenges laid out here is iLinc Communications. iLinc's Enterprise Collaboration Suite is an umbrella solution meeting government needs for online collaboration, meetings, support, and training. The solution is designed to deliver superior performance levels while clearly addressing the relevant security requirements and distinct technical issues of governmental organizations.

Taking advantage of unique features such as iLinc Division Controls, agencies can separate users into groups or create a hierarchy that mirrors the organization chart to further protect security. iLinc makes it possible to share a single centralized collaboration solution that allows for distributed rights and system administration, while maintaining a centralized database and license pool.

iLinc's Enterprise Collaboration Suite is comprised of four key modules:

- **MeetingLinc** - for online presentations, instant meetings, demonstrations, or team meetings. MeetingLinc — installed on an internal network or hosted by iLinc in a secure, scalable data center — has the power to erase geographic boundaries by enabling highly interactive, flexible, and powerful presentations over the Web. MeetingLinc also manages many aspects of scheduling online business meetings, such as invitations and reminders that can be automatically saved into Microsoft Outlook. MeetingLinc's ability to present a wide variety of content — PowerPoint slides, audio and video clips, documents, media files, and applications — adds power and persuasiveness to all online meetings.

- **ConferenceLinc** - for online events, Webinars, and large-scale meetings. iLinc's ConferenceLinc application saves time and money while providing the ability to communicate to large audiences virtually anywhere. For any situation that calls for a traditional "one-to-many" presentation format, ConferenceLinc offers an array of innovative communication technologies, such as interactive whiteboards, synchronized Web

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[3] John Kost, Gartner industry research report, "The Model Government IT Organization," June 2006.

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browsing, and the ability to record and play back conferences. Because ConferenceLinc was designed to accommodate participants with both high and low bandwidth Internet connections, everybody in an organization can take part in Web collaboration.

- **LearnLinc** - for online training, eLearning, virtual classrooms, or online testing and assessment. iLinc's comprehensive eLearning application that provides a highly secure and reliable platform for Web-based training and management. LearnLinc's advanced features deliver immediate improvement in the content, effectiveness, and consistency of online training programs. Several hundred private, public, and corporate universities state that they're able to simulate or surpass the effectiveness of an in-person training session with LearnLinc's interactive and collaborative capabilities.

- **SupportLinc** - for online customer support that requires rapid and remote problem solving. SupportLinc enables a deeper level of communication between IT support staff and customers than achievable via phone or e-mail. SupportLinc enables support representatives to reach across the Web and deliver an interactive experience that includes desktop and application sharing, as well as personalized features such as picture IDs and text chat.

Finally, iLinc's meeting, collaboration, support, and training software takes advantage of the latest interactive communications technologies, including:

- Voice over IP (VoIP)
- Audio and video conferencing
- Application and desktop sharing
- Interactive whiteboards
- Synchronized Web browsing
- Electronic hand raising, feedback, and Q&As

Whether a few managers in an agency want to arrange a meeting to explore some pressing issue or one wants to hold an online conference to share the year's agenda with 2000 employees, the iLinc Enterprise Collaboration Suite is designed to meet the demanding communication requirements of government organizations.

The Benefits of iLinc's Enterprise Collaboration Suite

The economic benefits associated with Web conferencing and collaboration are truly substantial. Such solutions offer an opportunity not only to reduce travel time and expenditures, but to decrease time spent making critical decisions. Moreover, Web conferencing and collaboration is increasingly recognized as a vehicle for taking actions that otherwise would not have been taken at all. It offers a clear opportunity to increase productivity and reduce costs.

Notably, iLinc offers unique benefits particularly important in the government arena. Recognized by leading industry analysts such as Forrester Research and Frost and Sullivan as one of the top performing Web conferencing solutions, iLinc's Enterprise Collaboration Suite offers a host of key benefits specifically designed to meet the objectives of government executives and IT decision-makers. Among them:

- **Choice of Deployment Model.** Recognizing the value of providing options, iLinc offers the suite through on-premise, hosted, and blended deployment models. Agencies can benefit from the elevated security, enhanced integration, and long-term ROI of the on-premise, software model. Or they may choose the hosted offering which enables pay-per-use and decreases demands on IT resources. Finally, they can choose a combined model that enables both installed and hosted collaboration environments. Depending on security levels and firewall restrictions, an agency can choose to a run session from either an internal or hosted server to meet bandwidth and ease-of-access requirements.

- **Control.** Securing data is a paramount concern of government agencies. With this in mind, iLinc offers the most advanced encryption methods. In fact, full SSL and complete end-to-end AES encryption is used for all live session data. Use of SSL is completely supported at

[4] Claire Schooley, Forrester Research, "iLinc Steps Up to the Plate in Web Conferencing," June 2006.

supported at the front end. iLinc uses this SSL connection to download a secure AES key of 128 bits or more, and uses it to encrypt all data at the client. The encrypted packets are then sent through the server (achieving maximum security and efficiency) and are not decrypted until they reach the receiving client. [5] Frost and Sullivan report, "'Linc-ing' the Enterprise: Web Conferencing Completes the Puzzle, 2004.4 Claire Schooley, Forrester Research, "iLinc Steps Up to the Plate in Web Conferencing," June 2006.

The client also can use a pure SSL encryption mechanism if desired. Moreover, it requires no third-party plug-ins and no changes to network or desktop configurations. With iLinc securely behind the firewall, there are no concerns about uploading confidential information to an outside server – increasing one's control over the entire Web meeting process.

Finally, the software is 100-percent developed and supported in the US, eliminating concerns about the origins of code development.

Flexibility. iLinc applications have been designed for rapid, seamless integration with existing systems such as authentication, instant messaging, and email. The open, free API includes sample integration code enabling IT to quickly and simply connect iLinc to enterprise solutions (e.g. LMS, CRM, HR, etc.). And, recognizing that different users and applications have different bandwidth requirements, the iLinc product includes the ability to throttle application sharing to maximize bandwidth usage. In other words, iLinc can limit the amount of bandwidth that application sharing will use (all the way down to the individual user level), thus limiting its overall impact on existing networks. Finally, iLinc flexibly accommodates all participants including

disadvantaged users. The company's product suite is in full compliance with Section 508 of the U.S. Rehabilitation Act. This ensures the solution is fully accessible to people with disabilities.

Ease of Implementation. Typical iLinc implementations take no more than a few hours. Most customers require little or no assistance in implementing even the on-premise, installed version. Server installation is packaged and runs as a wizard, requiring minimal input. Post-installation configurations are executed with simple .ini or text files. On the client side, implementation runs automatically the first time a user joins an iLinc session. Client upgrades install automatically as well. If a new version is available on the server, the install process runs unprompted with very minimal end-user interaction.

Scalability. With clients that range from a dozen seat licenses to several thousands around the globe, iLinc software is built for scalability. iLinc's enterprise deployment architecture and implementation tools have been developed to support very large installations that need to scale up rapidly. In fact, iLinc's architecture enables clients to cascade servers for near infinite scalability. Users can be centrally managed and load balanced across servers. This is a core concern for government organizations that are responsible for preparedness and responsiveness in the case of a situation that demands rapid action – and the ability to securely connect many people in a short period of time.

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[5] Frost and Sullivan report, "'Linc-ing' the Enterprise: Web Conferencing Completes the Puzzle, 2004.

About iLinc Communications, Inc.

iLinc Communications, Inc. is a leading developer of award-winning Web collaboration software and audio conferencing services. The iLinc Suite is used globally by customers for secure and cost-effective collaborative meetings, presentations, training and support sessions. iLinc is one of the few carrier-class providers that permits the purchase of a perpetual software license that may be either installed inside of a customer's network or hosted by iLinc. More information about the Phoenix-based Company may be found at www.ilinc.com.