



# **Elluminate's PowerLink for Blackboard Learning System – CE and Vista Enterprise**



March 2007

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## The Need for Synchronous Voice Interaction

For many educational institutions, the majority of distance courses use online asynchronous tools, possibly in conjunction with synchronous text chat or streaming video. With asynchronous distance education programs, students often experience a feeling of isolation. Throughout their program, students have to work mostly on their own, with little contact with other students and teachers. This isolation can be a serious detriment to learning in many. Studies indicate that interactions between students and teachers as well as student-to-student interaction greatly enhance distance education by improving student attitudes and motivation, increase completion of coursework, better performance on tests, and greater retention. Moreover, the increased interaction provides a sense of community to the students.

Research in distance learning continues to emphasize the importance of interaction for effective learning and teaching. Historically, technologies that increase interaction have been expensive, difficult to use and not often utilized. With the advances of technology and the ubiquitous nature of the Internet, distance learning is changing. It is now easy and cost-effective to incorporate interactive instruction using a new model of distributed learning that combines asynchronous online learning with online synchronous solutions.

Synchronous collaboration software, such as virtual classrooms, allow for real-time interaction with students and teachers. A model, which combines both asynchronous and synchronous learning to bridge students, teachers, and educational content in vibrant online learning communities, is the ideal solution. The desired outcome of using these synchronous communication tools is to add value of real-time interaction rather than just static content.

Synchronous interaction has many benefits to students and teachers, including the following:

- Immediate feedback to the students from teachers.
- Replicates the physical classroom model
- Reduces the feeling of isolation
- Provides a forum where students can collaborate at any time
- Fosters a sense of community with the learners
- Is best for students who have trouble structuring their time and therefore provides motivation to the students
- Excitement about a new technology which increases their technical aptitude

Even programs that have used synchronous models have not often used Voice as part of the learning model. Often this is because teleconferencing all the students and instructors together is troublesome and quite expensive. However, new solutions feature built in Voice Over Internet (VOIP), which does away with the need for a telephone – you can interact with students completely over an Internet connected computer equipped with a microphone and speakers (or headset). This added voice component provides:

- Increased human interaction improves results
- Increased meaning and understanding through a user's tone of voice
- Increased sense of "community"
- Effective and efficient communication vehicle
- Flexibility in responding and interacting
- Multiple methods to interact with students with differing learning styles

In all levels of education, the trend for distance learning programs is to provide a blended approach, which combines synchronous and asynchronous experiences in an attempt to maximize on the benefits of both models.

## Elluminate *Live!*® Overview

Elluminate *Live!* is the interactive, live eLearning and web conferencing tool that...

- Adds live interaction to distance learning
- Improves student performance, including those with special needs
- Promotes real understanding and active learning
- Offers high return on investment in a short period of time
- Ensures a superior user experience, regardless of connection speed

With Elluminate *Live!*, you can add live eLearning to your asynchronous distance education programs, with opportunities for real-time discussion and dynamic interaction between teachers and students. Only Elluminate *Live!* offers an affordable instruction delivery solution that enables you to duplicate any learning environment, from lectures and debates to small group discussions and presentations. With Elluminate *Live!*, you can attract and retain qualified teachers, leverage limited teaching resources, and enable real-time tutoring and mentoring. Your teachers can offer virtual office hours for students. And you can even increase the efficiency and effectiveness of your faculty and staff meetings.

Elluminate *Live!* is a virtual classroom and Web conferencing tool built specifically for live, multimedia collaboration. With Elluminate *Live!*, meeting is more productive, teaching more effective, and learning more enjoyable. So you can take your online education to the next level. And increase your reach and your enrollment — domestically and internationally. Elluminate *Live!* is powerful enough to reach hundreds of users simultaneously — across town or around the world. And it works with multiple platforms. So you can enhance the learning opportunities for your students, wherever they are located. You can even develop online communities and add online events, such as workshops, seminars, and conferences.

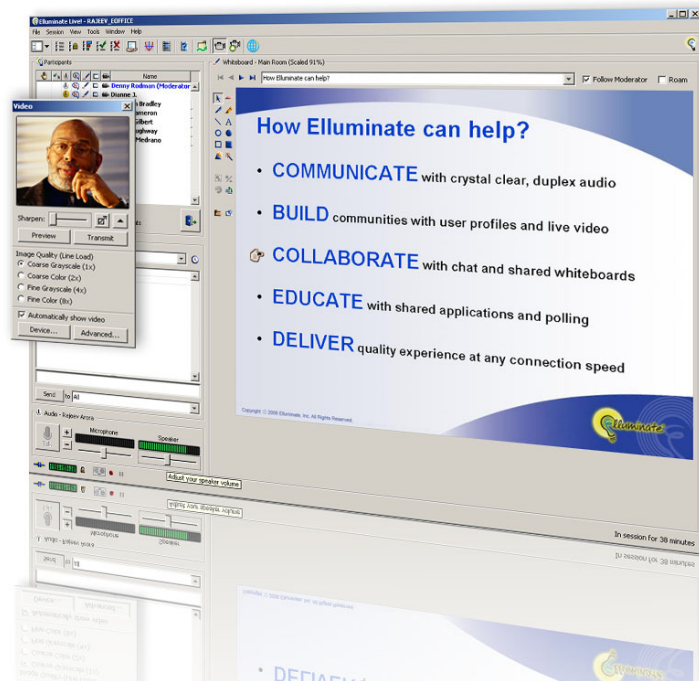
Unlike the Internet, Elluminate *Live!* is built specifically for live, multi-media collaboration. Our unique Collaborative Communications Framework (CCF) automatically ensures that everything is in the right place at the right time. Whether you have a dial-up modem or a high-speed LAN, you get the same superior quality, high performance, and dependability—with no lag time or garbled communication. So you can focus on content, not technology.

Elluminate's CCF creates a collaboration environment which can deal with the inherent unpredictability of the Internet. Rather than depending on the browser for bandwidth management, CCF optimizes a data stream specifically for the connection speed of each individual user, whether someone comes in on a 28.8K modem or a high speed LAN. *This is unique to Elluminate.* The advantage is that our audio is crystal clear, thus doing away with the need for telephone conferencing, and all users see and hear the same thing at the same time. This synchronization provides the teacher with the peace of mind that everybody else is in sync with what they are presenting – thus creating a far better user experience than the constant “can you see it yet” questioning that can go on.

## Elluminate *Live!* Academic Edition Overview

Add live eLearning to your asynchronous distance education programs, with opportunities for real-time discussion and dynamic interaction. Only Elluminate *Live!* Academic Edition offers an affordable instruction delivery solution that easily duplicates any learning activity—from lectures and presentations to small group discussions and debates.

Elluminate *Live!* is powerful but flexible, providing a customized online experience for every participant. Reach hundreds of participants simultaneously—across campus or around the world, so that you can enhance learning opportunities for all participants, while increasing your reach and your enrollment. Elluminate *Live!* also allows you to add virtual or blended online/onsite events, like workshops, seminars, and conferences, and develop online communities that facilitate social networking.



What's more, Elluminate *Live!* can also help you create the classroom of tomorrow—today. Expand the boundaries of your physical classroom with remote guest speakers, connect participants from other classrooms for combined lessons, and record content for participants who miss a class or need help preparing for exams. Present from a tablet PC, load a presentation template in the whiteboard, engage today's "digital generation" who are used to multitasking, and much more.

Elluminate *Live!* is a powerful, but flexible, tool that provides a customized online experience for every participant. It has the power to reach hundreds of participants simultaneously, whether across your organization or around the world. As a result, you can enhance learning opportunities for all participants while increasing your reach and your enrollment. Elluminate *Live!* also allows you to add virtual or blended online and onsite events, such as workshops, seminars, and conferences, and develop online communities that facilitate social networking.

By deploying Elluminate *Live!* Academic Edition as your synchronous communication platform, you will be able to provide assistance to students, promote understanding, improve student performance, and best of all, enhance the learning experience. Elluminate *Live!* is perfect for moderator-led courses, peer-based or professional tutoring, participant projects, staff meetings, virtual office hours, professional development, and much more. Elluminate *Live!* is a virtual classroom product that allows 2-way audio communications, instant messaging communications, and the use of a shared, interactive whiteboard to display educational content. Since classes are all online, they are accessible to all students.

With Elluminate *Live!* you can attract and retain qualified instructors and leverage limited teaching resources. Your instructors can offer virtual office hours for participants and enable real-time tutoring and mentoring. Provide professional development to teachers and administrative staff without costly travel or teleconferencing, and increase the efficiency and effectiveness of your faculty and staff meetings.

Common uses of this software platform include:

- One-to-one or one-to-many real-time online instruction.
- Live online tutoring sessions as drop-in homework help or scheduled sessions.
- Virtual office hours.
- Creating recordings as asynchronous content and reusable learning objects.
- Recording traditional classroom for later reference and review by instructors and students.
- Easily bringing Industry experts from around the world into the traditional classroom.
- Providing drop-in support and guidance.
- Delivering synchronous and asynchronous blended programs, both online and onsite.

Install Elluminate *Live!* on your server or have it hosted by us. Either way, it's easy to set up, easy to use, and easy to customize with your own courseware.

### **Superior User Experience**

Elluminate *Live!* is built specifically for live, multi-media, many-to-many collaboration. Our unique Collaborative Communications Framework (CCF) automatically ensures that all participants are in sync, whether they have a dial-up modem or high-speed LAN, PC or Mac. Our *No User Left Behind* technology means ALL participants, even those with disabilities or those in remote rural areas or third-world countries where Internet connectivity is less than optimal, get a richer, more interactive learning experience, with no time lag or garbled communication, so they can focus on content, not technology.

The system has been designed to ensure that all users, regardless of location, platform, and Internet connection, can expect to receive the same superior quality, high performance, and dependability while participating in Elluminate *Live!* sessions. All versions of Elluminate *Live!* are based on our company's proprietary Collaborative Communications Framework (CCF), which is a communication framework that creates a stable, consistent collaboration environment despite the inherent unpredictability of the Internet. Although the system is web-based, it does not rely upon the web browser for bandwidth management; rather, the CCF optimizes a data stream specifically for the connection speed of each individual user. The advantages are that the audio is crystal clear, and all audio and multimedia content is maintained throughout the session, whether a participant is connected by means of a 28.8K modem or a high speed LAN; participants need not worry about missing anything as a result of audio and visual "drop-outs" that may result from a slower Internet connection.

As well, all participants see and hear the same thing at the same time. This synchronization assures the moderator that all participants are in sync with what is presented, creating a far better user experience than the constant "can you see it yet" questioning inherent with other solutions. *This is unique to Elluminate.*

The modular nature of CCF also allows us to incorporate new functionality as needed with appropriate bandwidth management and prioritization. That means we are ready for the future and, as customers demand additional features, we can deliver.

We have also ensured that the ability to allow individuals with disabilities and other challenges to participate as equals in an Elluminate *Live!* session has been made a priority in the design and implementation of our software products. In support of the Americans with Disabilities Act (ADA), Section 508 of the Rehabilitation Act, and the World Wide Web Consortium (W3C) Web Accessibility Initiative (WAI), Elluminate *Live!* provides the ultimate in flexibility, enabling all individual users to experience our live eLearning and web collaboration environment in the best way possible. Other features have also been implemented that allow students with a range of disabilities and other challenges to participate. For more information about our commitment to

accessibility, see our *Voluntary Product Accessibility Template*, which is available from our website at <http://www.illuminate.com/accessibility.jsp>.

#### Illuminate *Live!* Academic Edition Features

<b>Superior Technical Foundation</b>	Collaborate in real time, regardless of Internet connection speed, with everyone seeing and hearing the same thing at the same time.
<b>Full-duplex Voice Over the Internet</b>	Participants and moderators speak to each other using full-duplex audio with built-in volume control through a standard microphone connected to the computer. State-of-the-art technology delivers incredibly clear and crisp audio— on bandwidths as low as 28.8Kbps. Sessions can be configured to allow up to six (6) attendees to speak simultaneously, perfect for speaker panels or small group discussions. Phone bridging is available if desired, enabling session to be 100% voice over the Internet, 100% teleconference, or mixed.
<b>Shared Interactive Whiteboard</b>	<p>Proprietary, shared whiteboard features easy-to-use and flexible tools for writing, drawing, and erasing. The whiteboard enables you to:</p> <ul style="list-style-type: none"> <li>▪ Have private and backup slides (sub-slides)</li> <li>▪ Indicate which slide is currently displayed</li> <li>▪ Collaborate on multiple whiteboard screens</li> <li>▪ Resize, insert, and re-arrange whiteboard screens</li> <li>▪ Edit, group, align, resize, and layer objects</li> <li>▪ Access a customizable library of presentation symbols and clip art</li> <li>▪ Enter multiple lines of text that wrap using a full editor</li> <li>▪ Cut, paste, resize text</li> <li>▪ Insert clickable URLs</li> <li>▪ Drag/drop images from file folder</li> <li>▪ Load animated GIFs</li> <li>▪ Insert images, clip art, screen capture</li> <li>▪ Save (as PDF) and print any screen, if permission is granted by moderator.</li> </ul>
<b>Application Sharing</b>	Share applications, desktop, or region of the desktop with others for hands-on training and demonstrations. Hosts have visual indicators of the content they are sharing. Easy-to-use menus and buttons allow hosts to take snapshots of the content for markup and share applications that run full screen while still managing interaction.
<b>Live Webcam Video</b>	Show live video at rates up to 60 frames per second. Set maximum quality for video display. Change video window size. Take snapshot of video content and mover to whiteboard. Give video privileges to one or more selected participants, or all participants.
<b>Remote Control</b>	Give control of applications or desktop to others, enabling true hands-on training and support. Allow users to take control automatically or by entering a password.

<b>Breakout Rooms</b>	Create breakout rooms that contain private audio and content (whiteboards, application sharing, etc.). Moderators can move themselves and participants between rooms freely and easily. Participants can be randomly assigned into breakout rooms and returned to the same rooms at any time.
<b>Virtual Labs</b>	Create a virtual lab environment where participants can work on applications independently. The ability to send keystroke combinations to remote machine allows users to seamlessly control a remote computer and its applications.
<b>Quiz Manager</b>	Moderators can deliver quizzes or surveys from within Elluminate <i>Live!</i> and create questions in advance or on the fly. Participants respond and submit their answers from within the session. Results can be displayed to all (in graphical format) or kept private. Results can be saved by moderator for future reference.
<b>Chat</b>	Participants and moderators can communicate using a variety of messaging capabilities, including private messaging between moderator and participant, one-to-one messaging between participants, and one-to-many messaging between moderator and participants. Direct message areas can be resized, as can the font in each area.
<b>Graphing Calculator</b>	Participants can plot one or two graphs and find their points of intersection and x- and y-intercepts. Use privately or share, with viewing controlled by the moderator.

### Content Development

<b>PowerPoint Import</b>	Load PowerPoint files onto whiteboard automatically with single mouse click. Presentations can be loaded onto the whiteboard at any screen size.
<b>Additional Content Import</b>	In addition to PowerPoint presentations, load OpenOffice and StarOffice presentations and PDF files onto the whiteboard. Users can also load images in various file formats, including BMP, JPEG, PNG, GIF, and TIFF. Animated GIFs can also be loaded.
<b>AppSnap™</b>	Capture screen shot from any application or your desktop and show it on whiteboard—another quick and easy way to build content for your sessions.
<b>Multimedia Content Delivery</b>	Play multimedia files, such as QuickTime movies, and load in library. Monitor download to participants and initiate playback.
<b>Synchronized Web Browsing</b>	Push participants to multiple URLs via embedded windows. Allow participants to interact independently with content in fully functional windows. Redirect participants to any link—all at the same time.

<b>Synchronized Notes</b>	All users can take notes in separate window. Notes are automatically saved to local computer and can be edited/merged/added to during interactive playback, saved to file, and shared with others.
<b>File Transfer</b>	Transfer files within the Elluminate <i>Live!</i> session to distribute documents, assignments, and handouts. Give privileges to participants to transfer files. When loading files, all users can be prompted to save the file, or files can be transferred silently and saved only by those who need the file.
<b>Interactive, Indexed Recordings</b>	Record and index live sessions for later play back for participants who missed a session or want a review. Build a library of live sessions, or create personalized content to be used asynchronously. Playing back recordings is just like being there— every bit of audio, every highlight; every shared application is recorded, and played back in perfect synchronization. Recordings are interactive, allowing users to save slides, text messages, and profiles. Easy-to-use controls allow viewers to pause, forward, rewind, or navigate to a certain location in the recording.
<b>Math Symbol Library</b>	Library of commonly used mathematical symbols is accessible by all participants. Customized symbols and images can also be added to library.

### Management and Usability

<b>Moderator Control</b>	All participants can see who is speaking, typing a message, or using the whiteboard; however, all communication within a session is controlled and monitored by moderator.
<b>Individual Bandwidth Management</b>	Rather than depending on browser for bandwidth management, Elluminate <i>Live!</i> optimizes data stream specifically for connection speed of each individual. Whether a participant uses a 28.8K modem or fast speed LAN, everyone sees and hears the same thing at the same time.
<b>Centralized Preferences Menu</b>	All customized preferences such as hot keys, video settings, profiles, connection speed, etc. can be entered from a single easy to use dialog box.
<b>Real-Time Session Awareness (Moderator ESP)</b>	Moderator knows whether participants are seeing what they should. When application sharing or displaying whiteboard content, moderator knows if participants are experiencing Internet delays and can adjust their presentation accordingly, with minimal disruption.
<b>User Profiles</b>	Attendees can enter their profile displaying a picture and contact information. Moderators decide who can view profiles: no one, only moderators, or everyone in the session. Allows others to save profiles as a vCard and send an email from within the session.

<b>Presentation Mode</b>	Focus attention on content with full-screen presentation mode. Presenters can force users to view whiteboard and application sharing content windows maximized.
<b>Timer</b>	An in-session timer can be launched during the session by the moderator and displayed to all users in the main room and breakout rooms. The timer can count up and down and an audible notification can be played when the timer expires.
<b>Clickable URLs</b>	Publish URLs from web tour to chat. Use clickable URLs with chat and whiteboard to allow users to open web page in new window independently.
<b>Participant Sort</b>	Manage large groups more effectively by sorting participant list alphabetically by name or by raised hands.
<b>Polling</b>	Poll participants with yes/no, true/false, or multiple-choice questions, and visually monitor responses, privately or publicly. Participants can provide feedback to moderator on pace of session. The results are tabulated and can be kept private or displayed as a graphic to all participants.
<b>Emoticons</b>	Participants can express themselves to moderator and other participants with emotion indicators.
<b>Close a Session</b>	Moderator can prevent additional participants from joining the session.
<b>“Stepped Out” Indicator</b>	Participants and moderators can let others know they had to step away from their computer temporarily.
<b>New User Notification</b>	Moderators can receive an auditory and visual notification when a new user enters the room.
<b>Hand Raise Notification</b>	Users can raise their hand at anytime to indicate they have a question. Users are placed in a queue. Moderators can decide if they wish to have an audible notification when users raise their hands.
<b>Track Whiteboards and Content</b>	Moderators have full session awareness with whiteboard content. Moderators can associate all objects on a whiteboard with each participant. When participants are allowed to navigate through slides, moderators can track which whiteboard screen each participant is viewing and ensure participants are on-track with assignments.
<b>Announcements</b>	Moderators can send text announcements to all participants, including those in breakout rooms.
<b>Language Translations</b>	Whiteboard and text chat automatically adapt to the language settings of the operating system for any language. Display menus and dialogs are available in English, Spanish, Japanese, Chinese (Simplified), Arabic, Portuguese (Brazilian) and French and automatically inherit language settings of the operating system.

## Accessibility

<b>Closed Captioning</b>	Moderator determines which participant(s) can view or provide closed captions. Use multiple streams for multiple languages or to create blogs of the session.
<b>Color Settings</b>	Automatically use desktop color setting, such as high contrast, in the Elluminate <i>Live!</i> interface.
<b>Direct Messaging</b>	Resize font and store default for easier readability.
<b>Short-cut and Hot Keys</b>	Activate menus, buttons, and dialogs with short-cut keys, including hand-raise, polling, and emoticons. Hot keys include activating audio, transiting video, and terminating application sharing.
<b>Screen Readers</b>	Provide verbal cues in Elluminate <i>Live!</i> interface via Java Accessibility Bridge to screen readers, such as JAWS and Narrator.

## Manageability

<b>Multi-platform Compatibility</b>	In addition to Windows, Elluminate <i>Live!</i> runs on MacOS, Linux (Novell SUSE, Red Hat), and Solaris.
<b>Server Software or ASP Service</b>	Choose between server software installed behind your firewall or an ASP service accessible from anywhere.
<b>Extensive Bandwidth Management</b>	Extensive bandwidth management provides total control over the Elluminate <i>Live!</i> network footprint with ability to rate, limit, or cap the amount of bandwidth to be used.
<b>Automatic Reconnect</b>	If Internet connection is temporarily lost, Elluminate <i>Live!</i> reconnects automatically: the user does not lose any content and is quickly resynchronized with the rest of the participants.
<b>SSL Communications</b>	Elluminate <i>Live!</i> can be configured to use fully encrypted communications (SSL).

## Minimum Configuration Requirements for an Elluminate\Blackboard System

The ability to integrate Elluminate *Live!* with Blackboard is supported in both our ASP environment, in which the Elluminate *Live!* Servers are hosted by Elluminate, as well as those client sites which deploy their own Elluminate *Live!* Servers. The hardware requirements provided here are intended for environments in which the Elluminate server software is installed and configured at the client site.

### Server Requirements (100 Concurrent Users)

The Elluminate *Live!* Server requires one of the following operating systems:

- Windows 2000 or 2003 Server (32 or 64 bit)
- Mac OS X 10.4 (PowerPC and Intel)
- Solaris 10 (SPARC or x86)
- Red Hat Enterprise Linux (RHEL4) – v4 for x86

- Novell SUSE Linux Enterprise Server 9 and 10

For installations of 100 seats or less, the minimum requirements for a single combined system are as follows:

- Processor — 1.2 GHz Pentium 3 (Windows, Linux, or Solaris); 2 GHz G5 (Mac OS X and Mac OS X Server), 750 MHz UltraSPARC II (Solaris).
- Memory — 512 MB of RAM.
- Network — Static IP address with 1-2 Mbps outbound bandwidth for every 25 users. Firewall access permitting connections to the server's Conference Ports for Elluminate *Live!* V8 Clients and to the Control Port for administrators.
- Disk Space — 400 MB of free disk space. This does not include the optional space required for extended log files and session recordings. In general, log files grow slowly, but about 5-10 MB of disk space could be required for each recorded 1-hour session.

For installations that are to support more than 100 concurrent users, it is recommended that the Elluminate *Live!* Manager, which is the software component with which the Blackboard adapter interfaces, and the Elluminate *Live!* Server(s) be installed on separate machines.

### Client Requirements

Windows:

- Windows 2000/XP/Vista
- Pentium III 500 MHz processor
- 256 MB RAM

Macintosh:

- Mac OS X 10.2.8, 10.3.9, and 10.4
- G3, G4, G5, or Intel processor
- 256 MB RAM
- Microphone (internal, USB, or iSight)

UltraSPARC Solaris:

- Solaris 10 (SPARC only)
- UltraSPARC IIc 300 MHz
- 128 MB RAM

Red Hat Linux (RHEL4):

- Pentium III 1 GHz processor
- 256 MB RAM

Novell SUSE Linux (SLES9 and SLES10):

- Pentium III 1 GHz processor
- 256 MB RAM

In addition, all of the above systems require:

- 20 MB free disk space
- Soundcard (except for Macs) with speakers and microphone or headset
- 28.8 kbps Internet connection

## Adding Synchronous Interaction with Elluminate's PowerLink

Blackboard PowerLinks make it possible for external applications to interface with Blackboard Learning System – CE/Vista Enterprise (formerly known as WebCT) e-learning platforms. Organizations are able to choose from an array of proven, partner-developed PowerLinks and even incorporate their own custom applications with the PowerLinks SDK for Blackboard.

Using Blackboard PowerLinks SDK, Elluminate was able to fully integrate their flagship product, Elluminate *Live!*, with Blackboard Learning System – CE/Vista Enterprise as though it was natively part of the platform. The comprehensive PowerLinks Kit included web services, native Java interfaces and detailed documentation describing each interface - giving Elluminate a secure, reliable way to integrate powerful extensions to Blackboard's core services and tools.

Elluminate's PowerLink features include:

- Integration with Course Tools, Learning Modules and Organizers
- Users are authenticated from the Blackboard database
- Provides all users access to Elluminate *Live!*
- Session creation by instructors and teaching assistants
- Display list and modify scheduled sessions
- Launch of sessions by all
- Ability for instructors to record sessions
- Playback of recorded sessions by all
- Access to users outside of Blackboard

The system interfaces include the following:

- Blackboard Learning System – CE/Vista Enterprise (formerly known as WebCT)
  - The Blackboard database will be configured with all necessary data for supporting the functions of the PowerLink
  - Blackboard provides authentication of users for the various roles and will be the front end for all user interaction
- Elluminate *Live!*
  - This can be an ASP or Server license
  - Sessions and recordings are launched and played back will all be hosted from the Elluminate *Live!* server
- Elluminate *Live!* Manager
  - API to the Elluminate *Live!* Manager Services for the management of the Elluminate *Live!* server

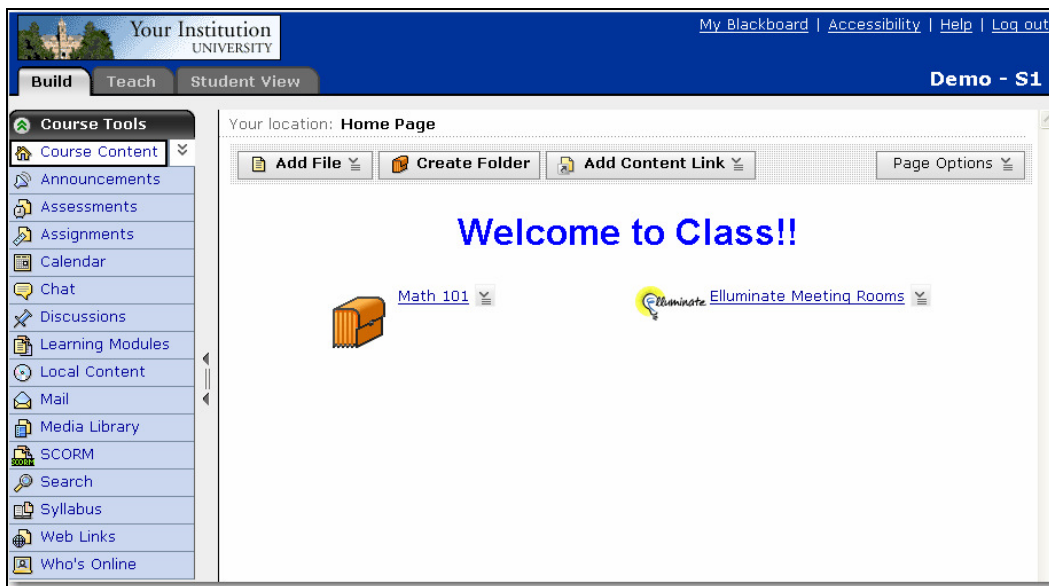
Elluminate designed its integration with customization and flexibility in mind. Server administrators may customize various fields for each CE or Vista Institution. These fields include the ability to define:

- Which roles (designers, instructors, teaching assistants, auditors, students) are allowed certain privileges:
  - Create / edit / delete / view / join / Moderate Elluminate *Live!* sessions
  - View / delete / playback Elluminate *Live!* recordings
- The format of the username appearing in the Elluminate *Live!* session. This can be a combination of the user's first name, last name and username in Blackboard
- The default name of the Elluminate *Live!* session when it is created. This can be a combination of the Institution, Group, Course and Section names
- The format of the email notification that is sent to users with their session invitation

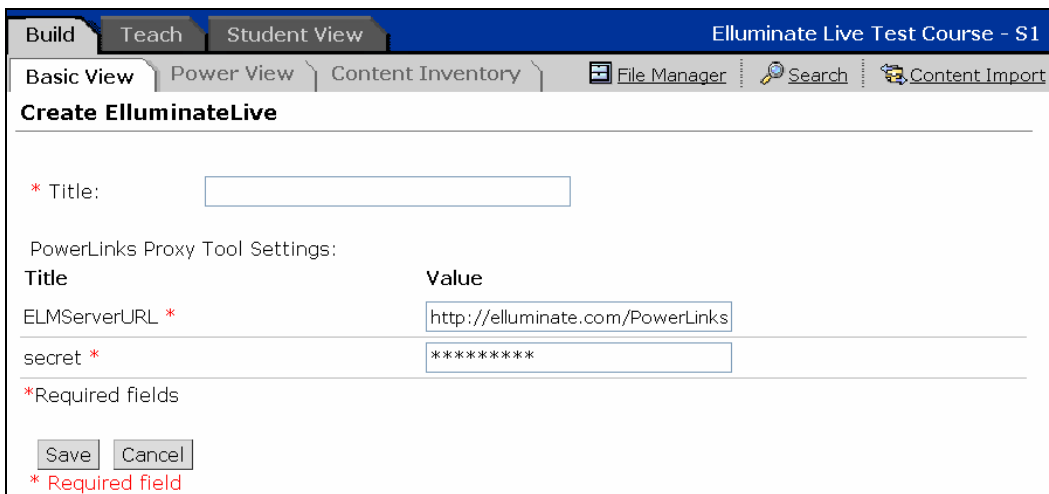
## Integration from the Section/Course Designer Level

Once the PowerLink is enabled at the Institution, the PowerLink can then be enabled by the Section/Course Designer for all of the instructors in that section.

Note: the images in this document are taken from a Blackboard Learning System – Vista Enterprise version 4 environment. The integration to Vista 3 and Campus Edition 6 behaves similarly.

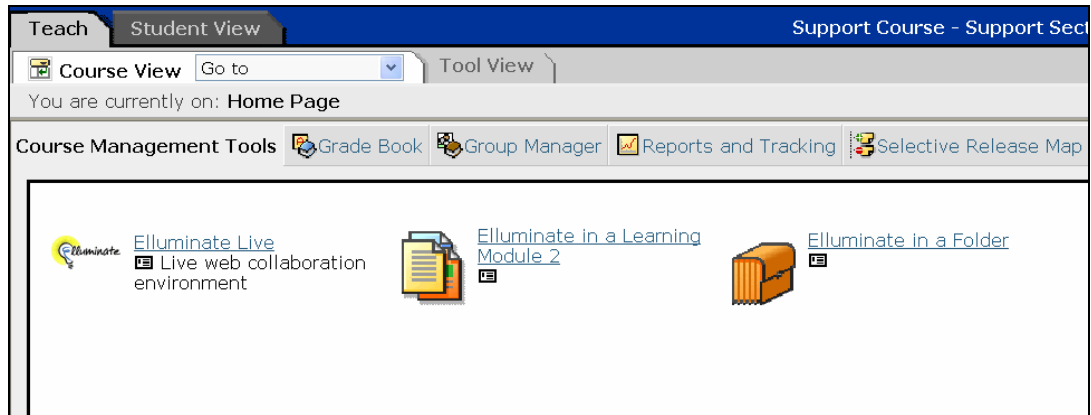


From the “Build” tab, the Designer can enable the PowerLink as a URL, Learning Module or an Organizer Page. The Designer only needs to provide a title for the Elluminate tool as the server and secret password are already pre-populated in the provided fields.



## Integration from Section Instructor Level

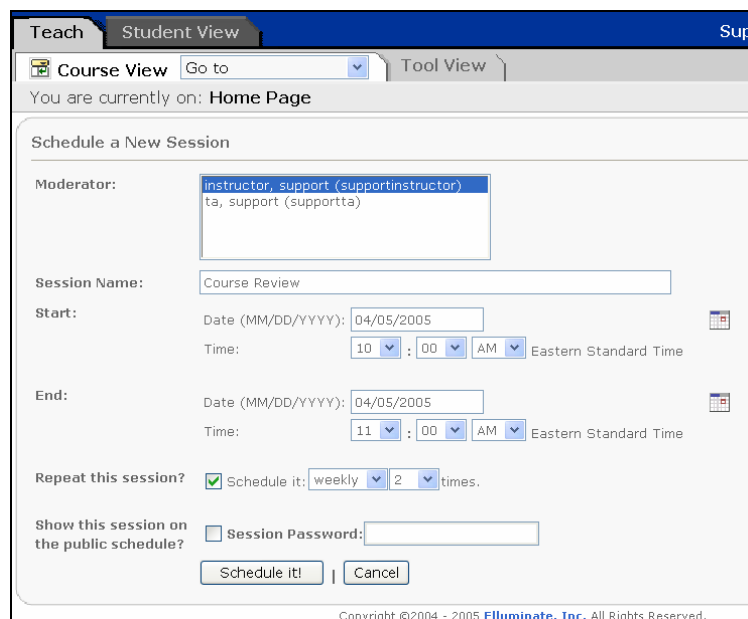
From the Teach Panel, access the Elluminate *Live!* is available to the Section Instructor. Elluminate *Live!* sessions are created by clicking any one of the areas that the PowerLink has been enabled from the “Teach” tab.



To create a session, the instructor must complete a form to define the moderator's name (multiple moderators can be selected from the list which includes the instructors name and all teaching assistants), the session name and the start / end time. Sessions can be for a short duration (for specific course content) or over an extended period of time (for virtual offices and open meeting rooms).

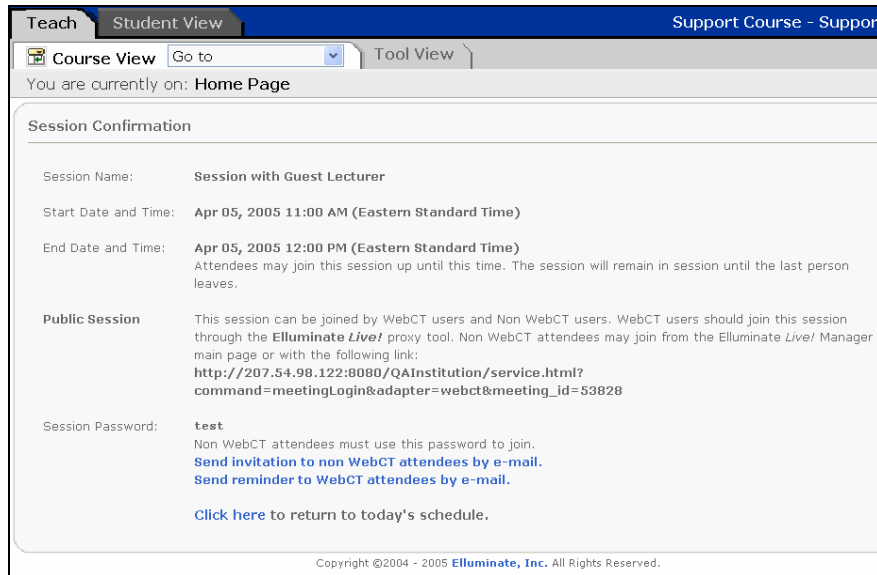
To create a session, the instructor defines:

- The moderator's name (multiple instructors can be selected from the list provided)
- The session name and the start / end time (the room can be open for any duration)
- Whether the session is recurring
- Whether to include it on the public schedule for access to users outside of Blackboard and password protect the session entry if desired.



Once the meeting is scheduled, from the Meeting Confirmation page, instructors can send an email confirmation to:

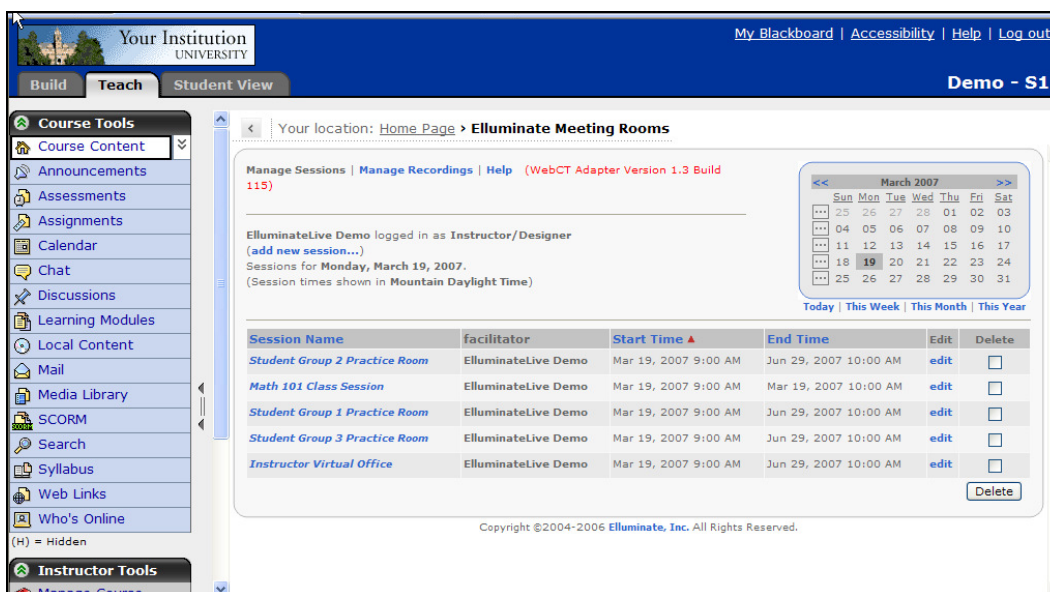
- Students in their course
- Non-Blackboard users



The email confirmation provides details on how to access the session, the password (if required) and how to download and install the required software prior to the session.

The instructor is able to view the current and future sessions that are available to the students. To join a current session, the instructor simply clicks on the name of the session. Elluminate Live! will launch and the instructor will join the room with moderator status. The instructor's Blackboard user id is authenticated and passed to the Elluminate Live! server prior to letting the user join the session. Once the instructor joins the room, they can decide when to start the recording.

The schedule of live sessions can be edited and deleted as necessary. The instructor is also able to view all recorded session and delete ones that are not needed.



## Integration at the Student Level

To join a live session or view a recording, the student simply clicks on the session name and the Elluminate *Live!* virtual classroom will launch. The student's Blackboard user id is authenticated and passed to the Elluminate *Live!* server prior to letting the user join the session.

Course Tools

- Course Content
- Announcements
- Assessments
- Assignments
- Calendar
- Chat
- Discussions
- Learning Modules
- Local Content
- Mail
- Media Library
- SCORM
- Search
- Syllabus
- Web Links
- Who's Online

Your location: [Home Page](#) > **Elluminate Meeting Rooms**

Sessions | Recordings | Help

ElluminateLive Student logged in as Student  
Sessions for **Saturday, March 24, 2007**.  
(Session times shown in Mountain Daylight Time)

Session Name	Facilitator	Start Time ▲	End Time
<a href="#">Student Group 2 Practice Room</a>	ElluminateLive Demo	Mar 19, 2007 9:00 AM	Jun 29, 2007 10:00 AM
<a href="#">Student Group 1 Practice Room</a>	ElluminateLive Demo	Mar 19, 2007 9:00 AM	Jun 29, 2007 10:00 AM
<a href="#">Student Group 3 Practice Room</a>	ElluminateLive Demo	Mar 19, 2007 9:00 AM	Jun 29, 2007 10:00 AM
<a href="#">Instructor Virtual Office</a>	ElluminateLive Demo	Mar 19, 2007 9:00 AM	Jun 29, 2007 10:00 AM

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## Access from Outside Blackboard

Elluminate provides a method to access Elluminate *Live!* sessions outside of Blackboard. This allows organizations to conduct meetings with users from other organizations and allows them to access Elluminate without having the need for a Blackboard account.

Non-Blackboard users can access sessions directly from the Elluminate *Live!* Manager. The main page shows all the sessions that are available. Moreover, meetings can be created and hidden from the public page and made accessible by email invitation only. Further, all sessions and recordings can be password protected for security.

Elluminate *Live!* MANAGER

User ID:

Password:

[Log In](#)

Meetings | Recordings | Help

Meetings for **01/03/2007 00:00 MST to 31/03/2007 23:59 MDT**  
(meeting times shown in Mountain Standard Time)

Time ▲	Meeting Name	Created By	Pwd?
28/02/2007 12:45 MST - 30/04/2007 20:00 MDT	<a href="#">Muriel Virtual Office</a>	Server Support	
27/03/2007 12:00 MDT - 27/03/2007 14:00 MDT	International Panel Discussion	Server Support	
28/03/2007 10:00 MDT - 28/03/2007 13:00 MDT	Administration Meeting	Server Support	

## Company Information

Elluminate, Inc. provides proven, best-in-class solutions for real-time online learning and collaboration. The company delivers exceptional results, including engaged participants, enhanced learning experiences, increased retention and completion rates, lower Total Cost of Ownership, and higher ROI.

Elluminate *Live!* features high-quality voice over the Internet, and robust, interactive functionality for participants and moderators. Our unique *No User Left Behind*<sup>™</sup> technology facilitates small group collaboration, simplifies large group management, enables blended learning, and fosters social networking, regardless of platform or Internet connection speed.

Elluminate is one of Deloitte's 50 Fastest Growing Technology Companies, the winner of several prestigious industry awards (including a Top Training Product award from Human Resource Executive magazine and Network Computing magazine's Editor's Choice Award for Web conferencing software) and is rated by Forrester Research as a "strong performer" in web conferencing. The company was also positioned in the Visionaries Quadrant in Gartner's Magic Quadrant for Web Conferencing 2007.

Headquartered in Calgary, Alberta, Canada, and Fort Lauderdale, Florida, Elluminate is the trusted choice of prominent academic institutions and corporations, such as ADP, Apple, DeVry University, Duke University, Georgia State University, Harvard University, Johns Hopkins University, Novell, PA Department of Education, Queen's University, Red Hat, Sun Microsystems, and many more.

For more information, please email us at [info@elluminate.com](mailto:info@elluminate.com) or visit us on the web at [www.elluminate.com](http://www.elluminate.com). You may also contact Elluminate by phone at 1-866-388-8674 (Outside the US/Canada, please call 1-954-229-2622).

More information about Elluminate's Building Block is available from the Building Blocks Catalog on the Blackboard website: <http://www.blackboard.com/addons/b2/catalog.htm>.