

Welcome to today's internet seminar, What's New with CLU-IN? Highlights and Future Directions". Hopefully everyone is starting on slide 1, our title slide. My name is Jean Balent. I'm an environmental scientist here at the Environmental Protection Agency's Technology Innovation Program. I will serve as both the moderator and primary speaker for today's session. Joining as well as are several other members of TIP. We are also joined by our technical support from Pete Riddle of EMS Inc. who serves as the primary contractor for CLU-IN.

I want to thank you all in advance for your participation and feedback during today's seminar.

Let's move onto slide 2 to cover some basic housekeeping.

Housekeeping

- Please mute your phone lines
 - press *6 to mute #6 to unmute your lines at anytime
- Do NOT put this call on hold
- We will ask for your feedback today. You do not need to wait for Q&A breaks to ask questions or provide comments
- To report technical problems, please use the ?
 Icon at the top of your screen



You can move forward/backward in the slides by using the arrow buttons

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Although I'm sure that some of you have these rules memorized from previous CLU-IN events, let's run through them quickly for our new participants.

Please mute your phone lines during the seminar to minimize disruption and background noise. If you do not have a mute button, press *6 to mute #6 to unmute your lines at anytime. Also, please do NOT put this call on hold as this may bring delightful, but unwanted background music over the lines and interupt the seminar.

You should note that throughout the seminar, we will ask for your feedback. You do not need to wait for Q&A breaks to ask questions or provide comments. To submit comments/questions and report technical problems, please use the ? Icon at the top of your screen. You can move forward/backward in the slides by using the single arrow buttons (left moves back 1 slide, right moves advances 1 slide). The double arrowed buttons will take you to 1st and last slides respectively. You may also advance to any slide using the numbered links that appear on the left side of your screen. The button with a house icon will take you back to main seminar page which displays our agenda, speaker information, links to the slides and additional resources. Lastly, the button with a computer disc can be used to download and save today's presentation materials.

With that, please move to slide 3.

Overview

- Motivation
- CLU-IN Overview and TIP
 - Recent Updates to CLU-IN
 - Future Directions for CLU-IN
 - Review of Internet Seminars on CLU-IN
 - Future Directions for Internet Seminars
 - Comments and Wrap-up
 - Feedback Form & Additional Resources

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In today's seminar we will cover a few topics. First, I'll provide a brief explanation of the motivations behind today's seminar, along with an overview of the CLUIN website and its relationship to the EPA's Technology Innovation Program for those who are new to the website and our services. Next I will highlight recent updates to CLUIN with a break to discuss users' opinions of these changes. We'll then take a sneak peak at a few planned updates to the site, pausing of course to hear what you think of these ideas. We will then move onto a similar review of the existing CLUIN internet seminar platform (that's what we are using today) and talk about our vision for future seminars. Finally we'll take a few moments to hear additional comments and wrap things up.

Most importantly, there will be a series of very specific questions on changes to CLUIN and our internet seminar platforms included in the feedback form at the very end of our talk. Please take a few moments to complete this form as this information is one of primary reasons for hosting today's seminar.

Lets move to the next slide.

Motivation

- TIP goal: keep CLU-IN as one of the leading sources for hazardous waste characterization and clean-up information
- Further meet the needs of CLU-IN users (that's YOU!)
- Objectives for today:
 - Inform CLU-IN users of recent updates and get feedback on these changes
 - Discuss future changes to website
- Cover options for improving internet seminar platform deliveries

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Today's seminar is being hosted for a few reasons. Here at the Technology innovation Program, we are actively working to keep CLU-IN one of the leading resources for hazardous waste characterization and remediation information. We also want to be sure that in doing so, we are meeting the needs of our users, meaning people just like those of you participating today.

During today's session we hope to inform you of recent updates to the site and listen to your comments on these changes. Very often we make modifications and have limited ways to know if you our users have found it helpful. In prior discussions with some of our other users about changes we learned that many people were unaware of the changes and wanted to see seminars about the website itself. We hope that today's session will help us close that feedback gap. As we cover future changes to the website and our seminars we want to ensure to focus our efforts in ways that will meet your needs to help us stay on the leading edge of clean-up information.

Lets move to slide 5.

CLU-IN Overview

- Hazardous Waste Clean-Up Information (CLU-IN) – source for hazardous waste site characterization and remediation information
- EPA content on CLU-IN is mirrored on the EPA gov website at <u>www.epa.gov/tio</u>
- To date, CLU-IN has seen 3.2 million
 visitors, averaging almost 2,000 visits a day

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The Hazardous Waste Clean-Up Information (CLU-IN) Web Site provides information about innovative treatment and site characterization technologies to the hazardous waste remediation community. It describes programs, organizations, publications, and other tools for federal and state personnel, consulting engineers, technology developers and vendors, remediation contractors, researchers, community groups, and individual citizens like you. CLUIN is provided by the EPA's Technology Innovation Program (aka Technology Innovation and Field Services Division, formerly known as the Technology Innovation Office). Let me end the alphabet soup there and simply state that TIP is part of the Superfund Program.

By hosting CLUIN as an outside website, TIP has had the power to share a wide variety of information from many sources with the public. We do also work to maintain an EPA presence by mirroring all EPA content from CLUIN off the EPA's public website.

To give you an idea of CLUIN's popularity, as of April 2007, 3.2 million visitors have been to CLUIN, averaging 2,000 visits a day.

Please move to slide 6

CLU-IN & TIP

- TIP is part of EPA's Office of Superfund Remediation and Technology Innovation.
- CLU-IN Timeline:
- Bulletin Board System (1987)
- CLU-IN Web Site Launched (1996)
 - Launched (1997)
 - Streaming Videos (1998)

 - •Internet Seminars (1999)
 - Online Databases (1999)
 - Technology Focus (1999)

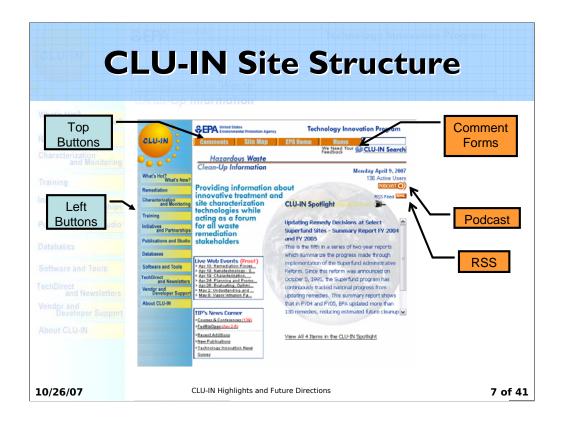
- •Conference Webcasts (2000)
- •Field Analytic Technologies Encyclopedia (2001)
- •TechDirect Information Service •Technology Innovation News Survey Archives (2002)
 - •Contaminant Focus (2003)
- •Vendor and Developer Support •Upgraded CLU-IN Search Engine (2004)
 - •Project Profile Databases Search (2005)
 - •RSS Feed (2005)
 - •Internet Seminar Archive Podcasts (2005)
 - •Issue Areas (2006)

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The origin of CLU-IN reach back to an early electronic Bulletin Board System. The CLU-IN web site was launched in 1996, and was operated in parallel with the CLU-IN BBS between 1996 and 1999. In 1999, The CLU-IN BBS was discontinued to better serve the growing CLU-IN web site user community. Some major CLU-IN events such as the start of TechDirect and Internet Seminars began this same year. Some of the more recent changes listed on this slide such as the addition of RSS and Podcast feeds will be discussed in today's seminar.



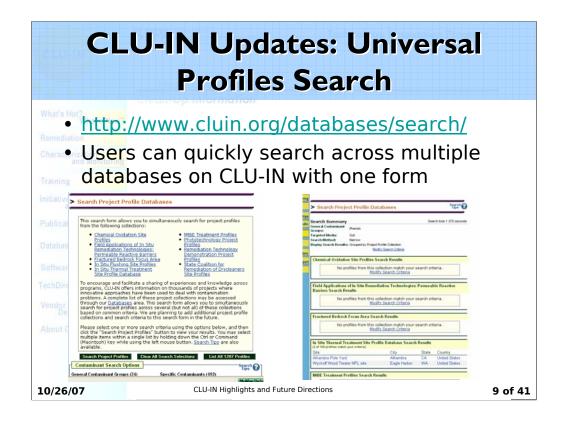
You should now be looking at slide 7 which shows a screen shot from CLU-IN. I'm sure you are all familiar with the website so I wont take too much time now. Let me point out the various pieces of the CLUIN site that I will refer to throughout today's seminar. Specifically, when I mention the top buttons, I mean the orange buttons with sitemap, comments, and search box. The left buttons are navigational tools that show the main sections of the site such as remediation and training. Some of the updates and features that will be discussed today are accessible/advertised right from the home page. For example: RSS and Podcasts are linked on the upper right corner below the top buttons. I'd also like to remind you of the comment form which is readily available within the top buttons on every page. We rely heavily upon user comments to help direct our efforts with this site. I'd encourage each of you to take the time to submit your comments (both good and bad) whenever visiting CLUIN.

Please move to slide 8.

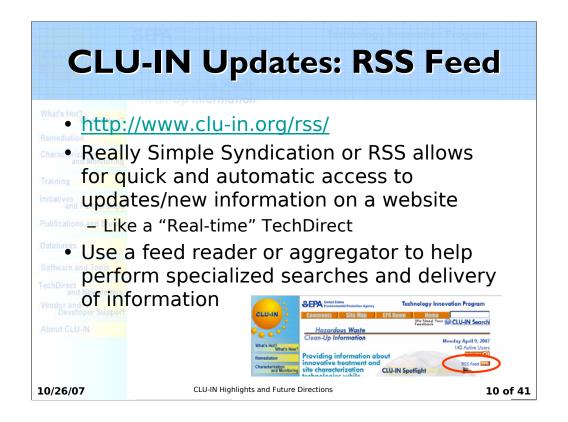
CLU-IN Updates Over the past 2 years, many changes have been made to CLU-IN including: Performance Updates Characterization Universal Profiles Search Questions to think Podcasts RSS about: Print page feature 1) Did you notice this Training Calendar Registration Confirmation change? Participation Confirmation Search abstracts 2) Do you find it useful? Graphic Version of TechDirect Content Additions Issue Areas New contaminant focus Navigational/Organizational Improvements Software and Tools Listings 10/26/07 CLU-IN Highlights and Future Directions 8 of 41

With that overview of the website, I will now cover some recent updates to the CLUIN. We've made a number of changes over the past 2 years which can be classified as performance updates, content additions, and navigational/organizational improvements. Performance updates represent those changes that make the site easier to use or expand your access to information on CLUIN. These changes have included: the universal profiles search, adding podcast and RSS feeds, incorporating a print page feature, adding a training calendar, expanding the site wide search engine to cover abstracts and upgrading to a graphical version of TechDirect. Content additions are just that, new focus areas and information resources that were not previously listed. Lastly, navigational/organizational changes have been made to ease your movement through the site and ensure that you can find information in a logical way. As we discuss these changes, I would like you to keep the following questions in the back of your mind for discussion: first, did you notice this change? Second, is it useful?

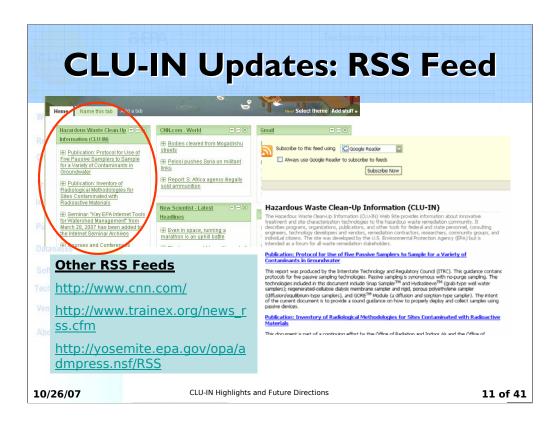
Let's move on to talk about these updates in more detail on slide 9.



The universal profiles search was added to allow users to search through multiple databases with one set of search criteria. Using the universal search form, profiles and case studies from 9 different databases (Chemical Oxidation, Permeable Reactive Barriers, Fractured Bedrock, MtBE treatment profiles, and remediation technology demonstration projects just to name a few). The picture to the right shows a results screen using this new consolidated search feature. Users can continue to individually search each database if desired.



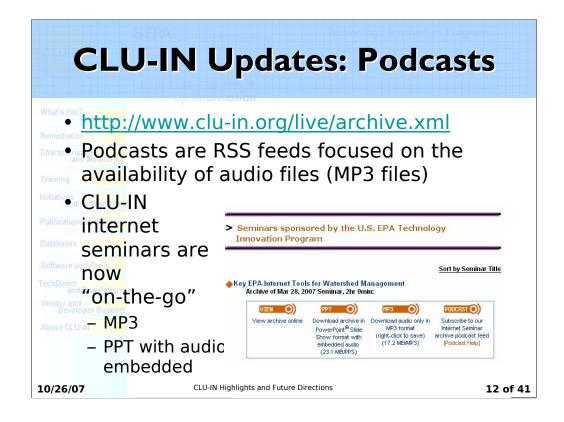
On slide 10 we will talk about RSS feeds. For those of you who are unfamiliar with this acronym, it stands for Really Simple Syndication. RSS allows for quick and automatic access to new information posted on a website. You can think of the CLUIN RSS feed as a "real-time" techdirect for the website. The RSS feed is simply a running list of new content posted to CLUIN updated in real time. RSS feeds are designated on websites using universal symbols such as the small orange XML image displayed on CLUIN. You can take this list and "feed" (hence the name) into a special reader or other program called an aggregator. These tools can be customized to do automatic searching and alerts when particular information is posted. A draft fact sheet on RSS, feed readers, and other interesting feeds has been included at the end of today's seminar in the links to additional resources.



Slide 11 shows a few images of RSS feeds. The image on the right is what the CLUIN feed looks like in a web browser like Firefox or MS Internet Explorer. The image on the upper left, circled in red, shows the CLUIN RSS feed as added to a personalized homepage. Many services like Google, Yahoo, and MSN allows users to customize their homepages with RSS feeds of interest. Just in the same way you can decide what news stories, movie times, sports scores, and stock quotes to display, you can also add content from any page that offers an RSS feed. Imagine being able to open an internet browser and readily have CLUIN updates on your homepage! One added feature of RSS feeds comes with the use of feed readers. In many cases, you can set up special searches so that the reader will scan feeds for terms of interest (such as perchlorate, and phytoremediation) and then alert you by email or other methods when something has been posted. A few additional feeds of interest including CNN, TIP's training exchange, and EPA's own news feeds are listed here.

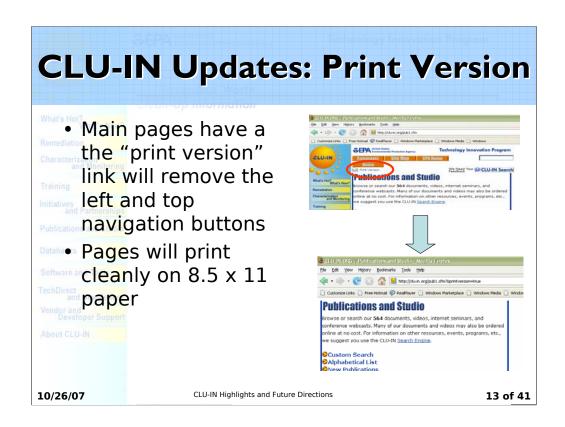
Does anyone have questions on RSS feeds at this time?

If not, lets move onto slide 12.

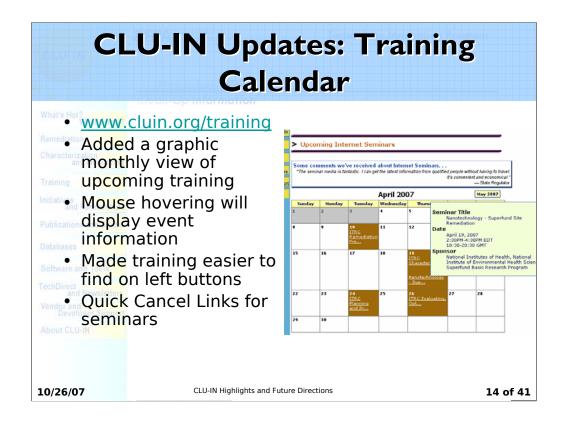


In 2005, archived internet seminars on CLUIN took on a new form with the development of a Podcast. If you are not familiar with the term, think of the popular portable music player devices from Apple: ipods. These devices play audio files (most commonly in the MP3 format) just like a walkman or CD player, except that the content is saved digitally. TIP recognized the value of making our internet seminars accessible and portable so we began offering the archived events as MP3 files to download to portable music players. Now our visitors can save the audio, print the slides, and catch up on missed seminars during a flight or commute home from work. With this new format, and the use of RSS, we also added a Podcast, which is simply an RSS feed that only lists new audio content found on CLUIN. The image on this slide shows the various formats for archived seminars: MP3s, powerpoint files with audio added to slides, or watching online just as the live participants did.

Let's move onto to slide 13.

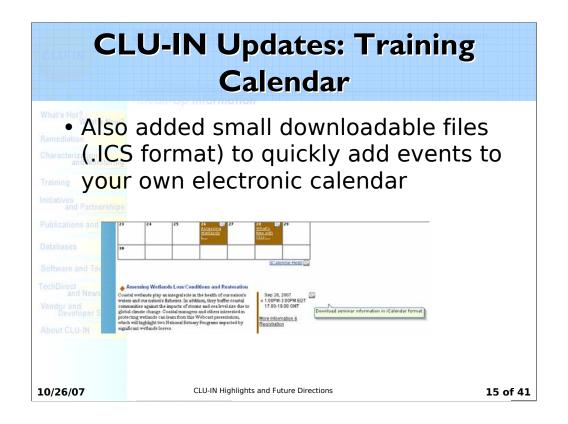


The print version feature was added last year to the main areas of CLUIN. Using this link found just below the top buttons in the left corner, visitors can quickly view pages on CLUIN in a format that will cleanly print on an 8.5 x 11 sheet of paper. This is brought about by removing the left and top buttons from the page. It's a common feature found on EPA.gov and other sites.

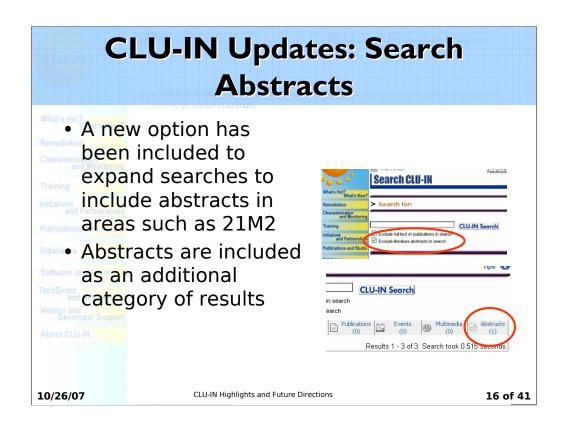


A graphical calendar view of upcoming training opportunities was added to the new training section of CLUIN in 2006. This new button for training appeared on the left navigational structure in an effort to quickly guide visitors to one of our most popular resources. With the addition of the calendar view, you can quickly see all events scheduled for a particular month and view details for each by simply hovering your mouse over the calendar listing. Detailed information and registration links are still provided in the same scrolling list format directly below this calendar. Also on the day of each event, you will find a quick cancellation link for that day's seminar if you are unable to attend. Note that this same information is contained within your seminar registration confirmation emails.

Lets move to the next slide

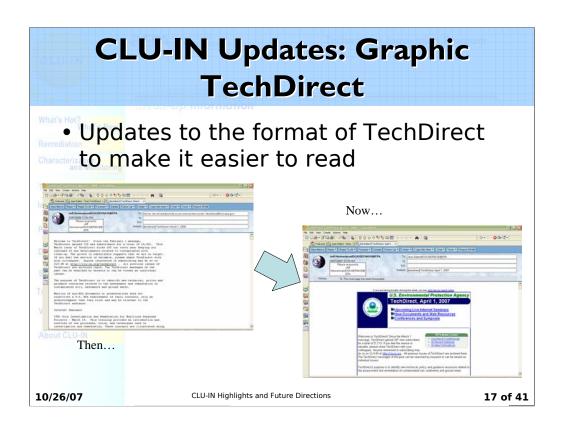


In an ever-increasingly digital world, we hope to expand CLU-INs event scheduling to include files to add events to your own electronic calendar. These files, in .ICS format (ics is a standard international calendar format, for more information please visit http://filext.com/file-extension/ICS), will be attached to seminar registration confirmation screens and images to directly import the event details to outlook, lotus notes, or other calendars. Downloading the ICS file doesn't constitute registration! This is simply a tool to help you incorporate our events into your own calendar. In future work these files could be used as event reminders should broadcasts be offered without requiring advanced registration.



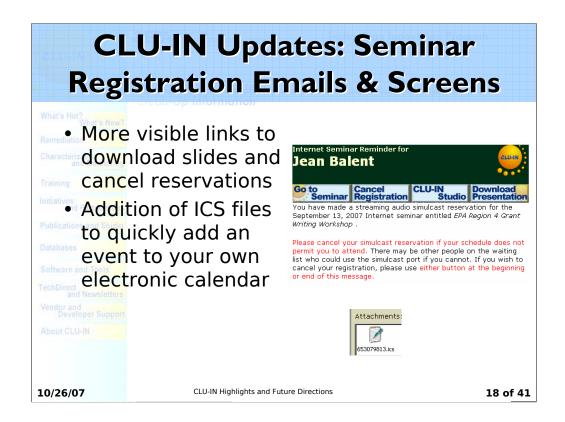
Also in 2006, the site-wide search engine for CLUIN was expanded to include additional resources on the site. In previous searching, abstracts for projects and research proposals from the 21M2 area of CLUIN were excluded due to the shear volume of results they encompassed. However, with a simple check of a box, you can expand your search to include these resources as shown on the images. Abstracts have been classified as a new type of results in the CLUIN search engine so you can quickly jump to these hits if so desired. Note that by default, abstracts are NOT included in a site-wide search. Users must check the box to include abstracts first.

If there are no questions, we will move to the next slide.



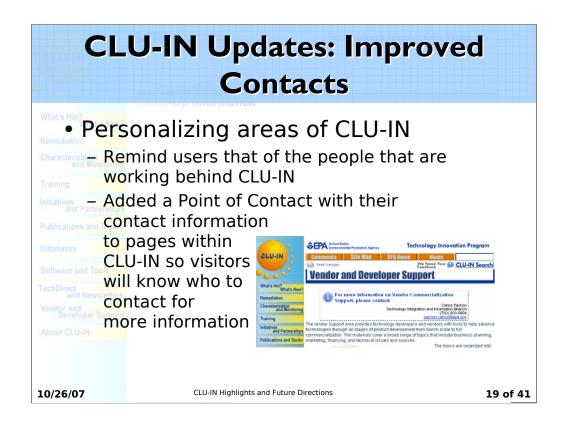
Just this year, a new graphical version of TechDirect was delivered to its 28,000+ subscribers by email. Rather than the traditional plain text version which tended to be a rather long email as shown on the left, colorful images along with hyperlinks to various sections of this monthly newsletter were added to make it easier to read and quickly find pertinent information. Users that are not able to view this graphic version will still receive the newsletter in plain text without taking any additional steps. TIP has already received positive feedback from subscribers regarding this change but we welcome additional input.

Lets move to the next slide.



We have also attempted to improve our seminar registration confirmations. We now include much more obvious links at the top of the screen as well as emails with links to download the slides and cancel your registration. We also include small electronic attachments as ICS files to directly add the registration information to your own electronic calendar.

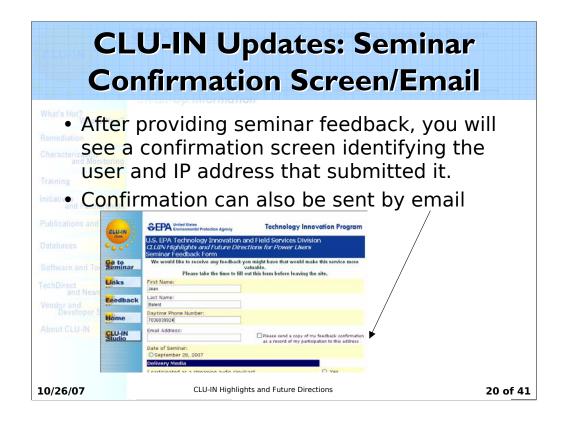
In an ever-increasingly digital world, we hope to expand CLU-INs event scheduling to include files to add events to your own electronic calendar. These files, in .ICS format (ics is a standard international calendar format, for more information please visit http://filext.com/file-extension/ICS), will be attached to seminar registration confirmation screens and images to directly import the event details to outlook, lotus notes, or other calendars. In future work these files could be used as event reminders should broadcasts be offered without requiring advanced registration.



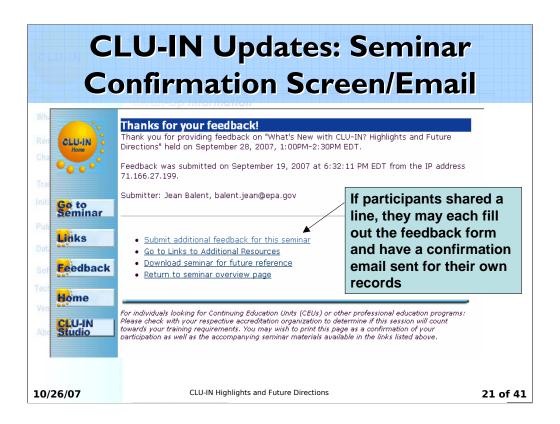
Personalizing CLU-IN will involve steps to remind you that there are real living and breathing people working behind CLUIN. The site as it stands now often makes little connection with information resources to the subject matter experts in house at TIP. For instance, did any of you know that buried in the "about CLUIN" section on the left buttons there is a subject matter listing? Since questions submitted on CLUIN are directed to our webmaster and main site points of contact (myself and Mike Adam), we have to work to ensure that we redirect them to the correct POCs for response. Its believed that we can:

- Better connect you the public with our staff by stating upfront on various pages on CLUIN who you should contact with questions
- Solicit more questions and inquiries by offering a name and face to reach to rather than a standard impersonal comment form to which you have no idea who it has been sent to and what they've done with it.

Lets move to the next slide.



To further help those participants that take part in our seminars as part of professional development or Continuing Education programs, we have created a seminar confirmation which is accessible after filling out feedback for a seminar. The confirmation will include specifics for the event, the name of the individual submitting the feedback for the event as well as the date, time, and IP address from which the feedback was submitted. This confirmation can also be emailed directly to the participant for their own records by checking the appropriate box on the top of the feedback form.



This slide shows a screen shot of the confirmation message which is displayed following submission of feedback. Note that we have also included an option for participants that chose to share a line with others so that each individual may submit feedback and receive confirmation for their participation.

Let's move to the next slide.

CLU-IN Content Updates

- Routine additions to resources on CLU-IN happen everyday.
 - New Contaminant Focus such as POPs and General Information for Other Contaminants
 - http://www.cluin.org/contaminantfocus/
 - FATE (Field Analytic Technology Encyclopedia) content was moved to CLU-IN's Characterization Area
 - http://www.cluin.org/char1_tech.cfm#tech_sele
 - Vendor Information from REACH-IT (Technology Vendor Information Database) moved to the
 Vendor Area
 - http://www.cluin.org/vendor/vendorinfo/

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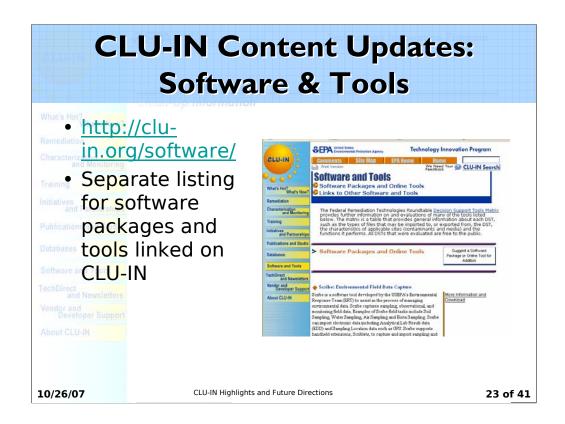
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Since its beginning TIP has worked diligently to locate and publish new information resources on CLUIN. This takes the form of adding new guidance, factsheets, and reports to creating new information resources such as contaminant focus. There are far too many content updates to cover in today's seminar (remember that's what TechDirect and our RSS feed were created for!).

In recent times, TIP in an effort to more efficiently handle its work assignments and ever-limited funds, has consolidated some of its information resources onto CLUIN. Examples of this work include moving the Field Analytic Technology Encyclopedia over to the characterization section of CLUIN. Another similar change was the addition of short vendor tables from REACH-iT on the Vendor Support Area.

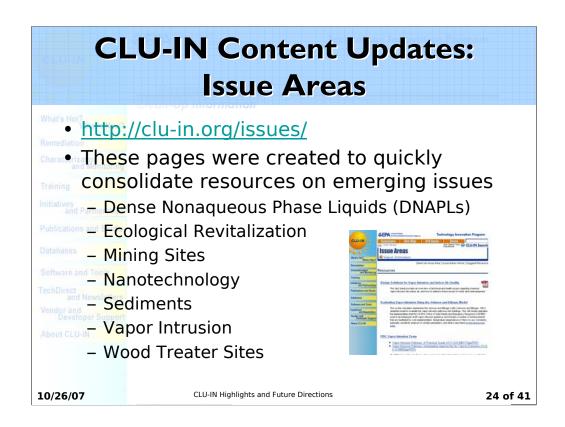
We have received many comments regarding the shut-down of REACH-iT and I do understand that it was a valuable resource to many of you in the audience today. Please continue to submit feedback via CLU-IN and know that we are working on ways to offer a similar service.



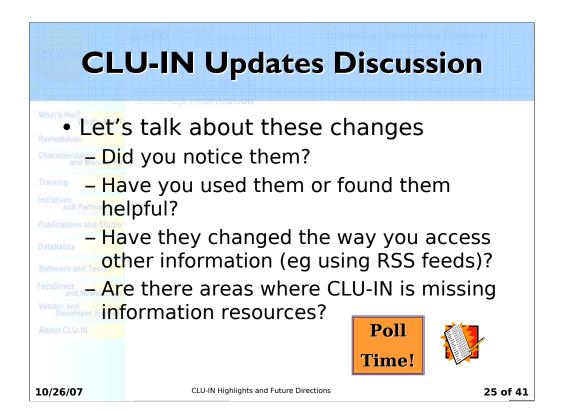
CLU-IN houses many different types of resources ranging from publications, databases, online information, and videos. Knowing that you, our users, often look for particular types of resources (eg training videos) we have attempted to tag resources to let you quickly access the right information as visible in the new search engine (which links types of resources from search results along top of page). With this same frame of mind, we created an area on CLUIN accessible from the left buttons that lists all software and tools found within CLU-IN. These tools range from Optimization software like MAROS to a decision support tool like VSP.

At this time, CLU-IN only lists packages that are available for free to the public, although we welcome suggestions for other tools to include.

Let's move onto the next slide.



Last year a new type of page on CLUIN called "issue areas" was created to rapidly group information resources for a particular topic of high interest. Often times the creation of a more detailed contaminant or technology focus can take some time and effort. Meanwhile TIP staff already have access to several websites and documents that may be of interest to those looking into new, emerging issues like nanotechnology. These pages were put together as a first cut for future information resources on CLUIN.



Now its time to open the phone lines and comments submitted online. I'd like to start discussing the changes we've just gone through. Lets start addressing some basic questions:

- 1) Did you notice these changes?
- 2) Have you used them? Are they helpful?
- 3) Have they changed the way you access information?

These questions are also included in the feedback form at the end of this seminar.

Please take a few moments to submit your answers at the conclusion of today's session.

Future Directions: CLU-IN

Current Development Areas

- Site Tour
- Content Additions and Updates

Possible changes in the future

- Radio Shows
- Event Based Site Management
- Discussion Boards
- Increase multi-media materials
- Online Vendor Phone Book
- Improved Internet Seminar Platform

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Now that we've gone over some recent changes, lets dive into our plans for the future. Work on many of the items listed on this slide has already begun. However, we are looking for more input and ideas for other ways to improve the site.

Lets move to the next slide.

Future Directions: CLU-IN Currenty Judg Decopment Site Tour Characterization Create a short flash-based walk-through of CLU-IN for newer users Intiatives and Power Will visually and audibly point out key Publications and Features of website Databases Software Audio Clips TechDirect — Add short audio clips for each main area Vendor and Power to vocally describe the website section About CLU-IN CLU-IN Highlights and Future Directions 27 of 41

These two proposed features are designed to help new visitors to the site. A site tour could be created such as the one for SMARTe (http://www.smarte.org/smarte/tutorial/tutorial_overview.htm) to walk visitors through the main areas of CLUIN. This tool will hopefully explain the navigational structure

Furthermore, adding short audio clips to verbally describe sections of CLUIN could be added.

We are developing these items now and expect to make them available to the public this fall.

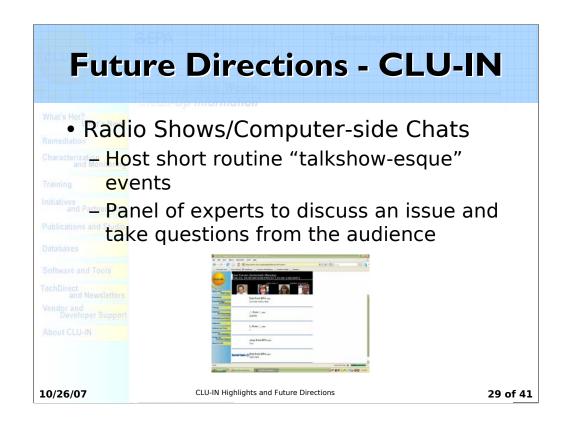
Lets move to the next slide.

of the site.

Future Directions: Content Additions/Updates What's Hoty Chara Contaminant Focus Training - DNAPL Introduction (Characterization Area) Databases Software and To Membrane Interface Probe (MIP) TechDirect - Immunoassay Vendor and New Membrane Service Chemical Sensors About CLU-IN - Ground Penetrating Radar (GPR)

Several areas of new and/or updated content will be made available on CLU-IN later this year. The newest addition will be an extensive contaminant focus on DNAPLs (dense non aqueous phase liquids). Furthermore, we will be adding to the old FATE materials which were moved to CLU-IN's Characterization section with updates to the Membrane Interface Probe, Immunoassay, Fiber Optic Chemical Sensors, and Ground penetrating radar technology descriptions. Additional updates will continue throughout the year just as we do now with postings of new events, publications, databases, and tools.

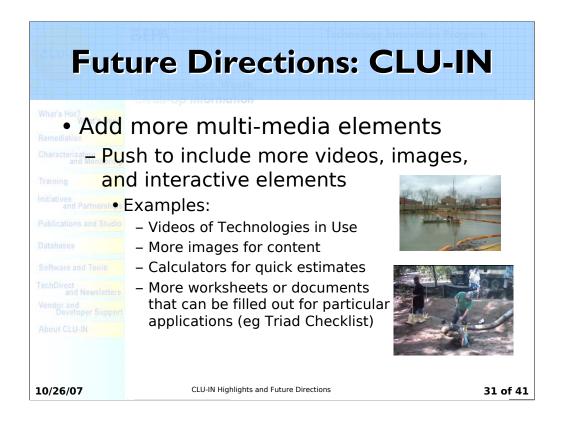
Lets move to the next slide.



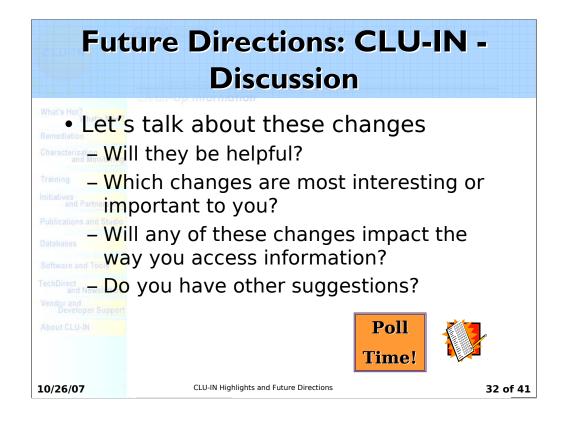
One suggestion has been to add a new format of live deliveries on CLUIN, similar to a radio or talk-show. Rather than following scripted presentations, a panel of experts will be brought together by phone to briefly discuss an emerging issue and answer questions from the audience. This style of event could make use of chatting capabilities already present, but rarely used on CLUIN.

Future Directions: CLU-IN What's Ho? Event Based Site Management Characterization Organize more seminar series Training - Push monthly topical focuses Initiatives and Particular House "What's new with CLUIN publications and Site Management Try to structure visits to site at Technication particular times or around certain Vendor and Developer's events About CLU-IN Highlights and Future Directions 30 of 41

Along the same line of thought, efforts may be focused in managing CLUIN in a more event-oriented basis. Specifically, seminar series such as the nanotechnology seminars or sediment training would be arranged throughout the year. CLUIN could offer monthly focuses which would target particular issues on the spotlight of CLUIN as well as the seminars arranged for that month. TIP could also routinely host "what's new with CLUIN?" seminars just like this one to alert users to recent changes and additions in a live forum.



As more data is able to be exchanged online at rapid rates, CLUIN can be directed to incorporate more multi-media elements which may have been previously too big to share online. For instance, TIP can include more videos of technologies in use and animations for various remedial strategies. A greater amount of images could be added to all areas of CLUIN. Calculators like those found on the EPA ORD site (http://www.epa.gov/ord/htm/databases.htm) could be included. Interactive forms and documents to be filled out by site visitors could also be added to the site as appropriate.



Now its time to open the phone lines and comments submitted online. Lets start by addressing these questions:

- 1) Will these changes be they helpful?
- 2) Which ones are the most interesting to you?
- 3) Will any of these proposed steps change the way you access information?
- 4) What about other suggestions?

These questions are also included in the feedback form at the end of this seminar. Please take a few moments to submit your answers at the conclusion of today's session.

CLU-IN Future Directions: Internet Seminars

- Current platform for Internet Seminars on CLU-IN allows speakers to share Powerpoint slides using a conference lines
- Seminars are recorded and archived for replay online
- More than 400
 seminars and 70,000
 participants
 since 1999

RISKCLearning

RISKCLearning

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Applications and implications for Superfund

Applications and implic

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Since most of you have made regular usage of our internet seminars and/or have hosted these events in the past, there is not much need to review the existing platform. Since TIP began hosting CLUIN internet seminars in 1999, our speakers have shared powerpoint slides and related information using a simple internet connection and telephone conference line. Our seminars are commonly recorded and archived for replay and download online. Almost 400 seminars have reached nearly 70,000 participants in the last 8 years.

Lets move to the next slide.

CLU-IN Future Directions: Internet Seminars Advantages - Advantages - Easy platform to use with minimal technical difficulties - Can reach very large audience across great distances - No software to install - Inexpensive - Limitations - Speakers have no control over slides, cannot annotate

the number of participants we can handle

No video, animations, or live screen sharing

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- Can only host 1 event at a time and have limitations on

Having the experience with our existing system or platform, you will note the pros and cons shown on this slide. CLU-IN uses a very simple platform where large audiences can be reached over great distances at a very low cost. Aside from MS MediaPlayer or RealPlayer, no additional software needs to be installed to participate in an internet seminar. That being said, the platform expects each user to move themselves through materials with a speakers cue. Our speakers have no control to move the slides for participants, we have no way to draw, point or annotate the slides and are limited to sharing only static slides, lacking animations, videos or other "attention-grabbers" often used in training. Furthermore, we can only host 1 event at a time on CLUIN reaching out with no more than 250 ports between phone and simulcast lines. As internet seminars are becoming increasingly popular these limitations may become problematic in the future.

Please move to the next slide.

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CLU-IN Future Directions: Internet Seminars

- Newer more powerful platforms are becoming widely used
- Ex: WebEx, GoToMeeting, Live Meeting

Questions to think about:

- 1)Have you used these other tools?
- 2)Do you find their tools useful?
- 3)Would you prefer CLU-IN seminars be hosted using these platforms?

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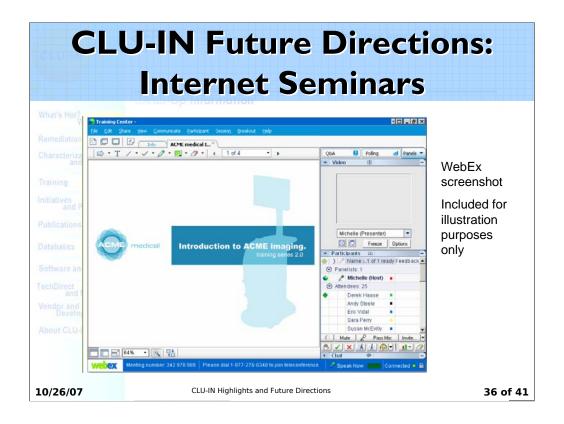
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As the usage of the internet as training vehicle has greatly increased over time, there are many other platforms that you may have used for other training events. A few examples include WebEx, GoToMeeting, and MS LiveMeeting. These tools offer increased options not currently available on CLUIN.

As we talk about some of the typical features of these other platforms, please keep the following questions in the back of your mind:

- 1) Have you used other tools?
- 2) If so, were these useful to you?
- 3) Would you prefer CLUIN seminars to be hosted by these platforms?



For those of you that have never used Webex or any of the other tools previously mentioned, this is a screenshot. For the most part, all of these commercial packages have the same features though they may appear slightly differently on each tool.

Note that this particular platform has video feeds, a live list of a participants, slide annotation tools and much more. We will discuss some of these features on the next slide.

Lets move to the next slide.

CLU-IN Future Directions: Internet Seminars

- Chat Feature
- Users can type short text strings to each other, speakers, or all members to communicate while session takes place
 - Examples: AOL's Instant Messenger, Google Talk, MSN Messenger, etc
- Slide Control/Annotation
- Speakers can move slides for all participants
- Speakers can highlight and draw on slides live so that all participants can view these changes

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Chatting offers both participants and speakers the ability to type text-based communication during the event. CLUIN only allows for 1-way chat where speakers can view comments submitted by participants using the question form. Using a chat feature, speakers/moderators could acknowledge that a question has been received, participants could share information without disrupting the seminar, and more specific information such as relevant URLs could be accurately and quickly shared during a session. Many of you may have used this tool in the form of AIM, Google Talk, or on other web training platforms.

Slide control and annotation is a self-explanatory option. Speakers will control the movement of slides so that participants view what the speaker chooses to show them. Speakers and moderators can also draw, highlight, and manipulate slides with this feature (just like one might use a laser-pointer in person). In some packages, participants may be given the power to annotate slides as well.

CLU-IN Future Directions: Internet Seminars

- Screen Sharing
- Speakers can show live images of their computer screens to demo software packages and other files to participants
- Video Feed
- Web cams can show speakers live during session
- Movies can be imbedded into seminars for viewing during the event

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Screen sharing involves the live broadcast of a portion of the speaker's computer screen. The entire screen may also be shared if desired. This feature allows participants to view any material that can be opened on the presenter's PC including movies, model simulations, data tables, and more. This option could greatly expand the types of training conducted on CLUIN.

Video feeds allow speakers and participants to share live images using webcams. These tools can help overcome the impersonal and distant impressions from internet seminars by presenting a virtual face-to-face meeting.

CLU-IN Future Directions: Internet Seminars

- Increase Capacity
- Handle more participants via simulcast
 - Currently host ~100 or fewer simulcast ports
 - Increased capacity may double that value
 - Provide higher quality audio for simulcast participants
 - May be able to double the audio clarity
 - Host more seminars per month
 - Possible to host multiple seminars at the same time

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Another issue that are examining is the area of increased capacity. Capacity in this sense, loosely refers to quantity and quality for seminars. This entails being able to provide more simulcast ports per seminar. CLU-IN usually offers 100 or fewer simulcast ports but we may be able to double that number in the future permitting more users to attend events live. In addition we are looking at the audio quality offered to our simulcast participants and archived seminars to improve clarity. Lastly, we are exploring options that will permit us to host more events and allow for simultaneous seminars.

Lets move to the next slide.

CLU-IN Future Directions: Internet Seminars

- Let's talk about these new platforms
- What features would you like to see for CLU-IN seminars?
 - Chat feature
 - Slide Control/Annotation
 - Screen Sharing
 - Video feed
 - Handle more participants
 - Handle more seminars
 - Others?

Real-time polling
 Chat feature

Improved Audio





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Just to reiterate, take a look at the list of features here and think about how they could be used to improve training on CLUIN. These features include: chatting, slide control, screen sharing, video feeds, and increased hosting power.

Lets talk about these features and what you would most like to see on CLUIN



Thank you again for your attention and comments. I want to remind each of you that we are looking for your specific responses to many of the issues discussed today in our feedback form following this session.

Also, there are several resources and related documents included in the links to more resources on this page.

If you have any additional questions or comments, please feel free to contact myself or fill out a comment form on CLUIN.

Thank you and have a great afternoon.