



The EPA Portal

Communicating and Collaborating in
a Web 2.0 World

Office of Environmental Information
US EPA

Wednesday, December 10, 2008
Environmental Information Symposium



Panel Members

- Terry Grady, Office of Environmental Information
 - Moderator and EPA Portal Manager
- Jacques Kapuscinski, Office of Research & Development
 - Collaborating on a Global Scale: The Environmental Science Connector
- Timothy Hinds, Office of Environmental Information
 - Collaborating for Quick Success: The HPO and INTIMA Initiatives
- Jean M. Balent, Office of Solid Waste and Emergency Response
 - Web Conferencing: Connecting People Anywhere, Anytime



Agenda

- Introduction
- What is Web 2.0?
- The Portal as a Web 2.0 Platform
- Collaboration Successes of the EPA Portal



Web 2.0 - A Changing Definition

“The changing trends in the use of World Wide Web technology and web design that aim to enhance creativity, communications, secure information sharing, collaboration, and functionality of the Web.”

– *Wikipedia*

“A term to describe web sites and services where the content is shaped partially or entirely by the users (instead of being read-only and published by a sponsoring company).”

– *Penn State IT Services Web Site*



Benefits of Web 2.0 Technologies

- Improves Communication with:
 - Peers, Other Agencies, Non-Federal Partners
- Creates a Participative Dialog that:
 - Provides constituents with an opportunity to be heard and add value
 - Encourages participation at all levels
- Fosters New Ideas for:
 - Topic-based conversations which encourage participation
 - Process improvement
 - More effective, efficient business processes



Professional Networking

Web 2.0 allows for online professional networking to:

- **Create links** between you, your peers, and your business associates
- **Build relationships** and share important information as Web culture communities
- **Open new ways of collaborating globally**

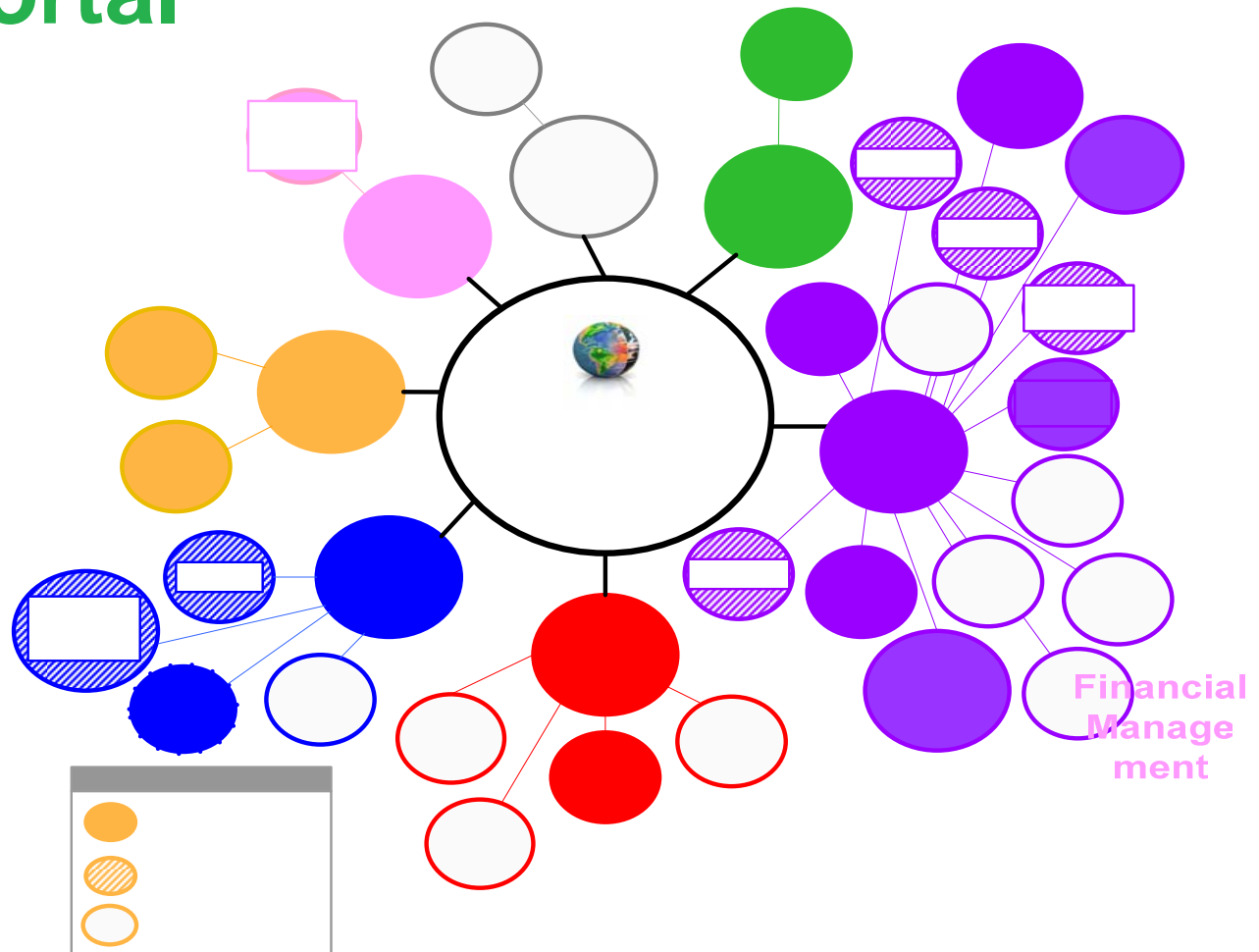


Web 2.0 Technology in Portals

- **Portals:** Provide a customizable interface allowing users to specify functionality and content relative to their business needs
- **Discussion Boards:** Provide a location to conduct open discussions on business topics
- **Instant Messaging:** Provide quick avenues of communication
- **On-line Libraries:** Provide a central location to store and retrieve business documents
- **Web Conferencing:** Provide on-line sharing of presentations and co-authoring of business documents
- **Wikis:** Provide a site to co-author Web content
- **Blogs:** Provide a forum to publish personal commentary



Professional Networking Communities in the Portal





EPA Web 2.0 Successes

- Jacques Kapuscinski, Office of Research & Development
 - Collaborating on a Global Scale: The Environmental Science Connector
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 - Collaborating for Quick Success: The HPO and INTIMA Initiatives
- Jean M. Balent, Office of Solid Waste and Emergency Response
 - Web Conferencing: Connecting People Anywhere, Anytime



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Collaborating on a Global Scale: The Environmental Science Connector

Jacques Kapuscinski - Program Manager
Office of Research and Development
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What is the Environmental Science Connector?

portal.epa.gov/ESC

- Virtual Project Space to:
 - Collaborate and share research and project information
 - Conduct real-time, interactive scientific investigations
 - Discover related projects
 - Customize content to support the ways that scientists work
- Dynamic Workspaces to:
 - Access tools, resources (e.g. Data, Models, Scientific Sources and Publications)
 - Build and Access Document Libraries
 - Participate in Discussion Forums

All the tools for *a scientist's workbench* in one place!



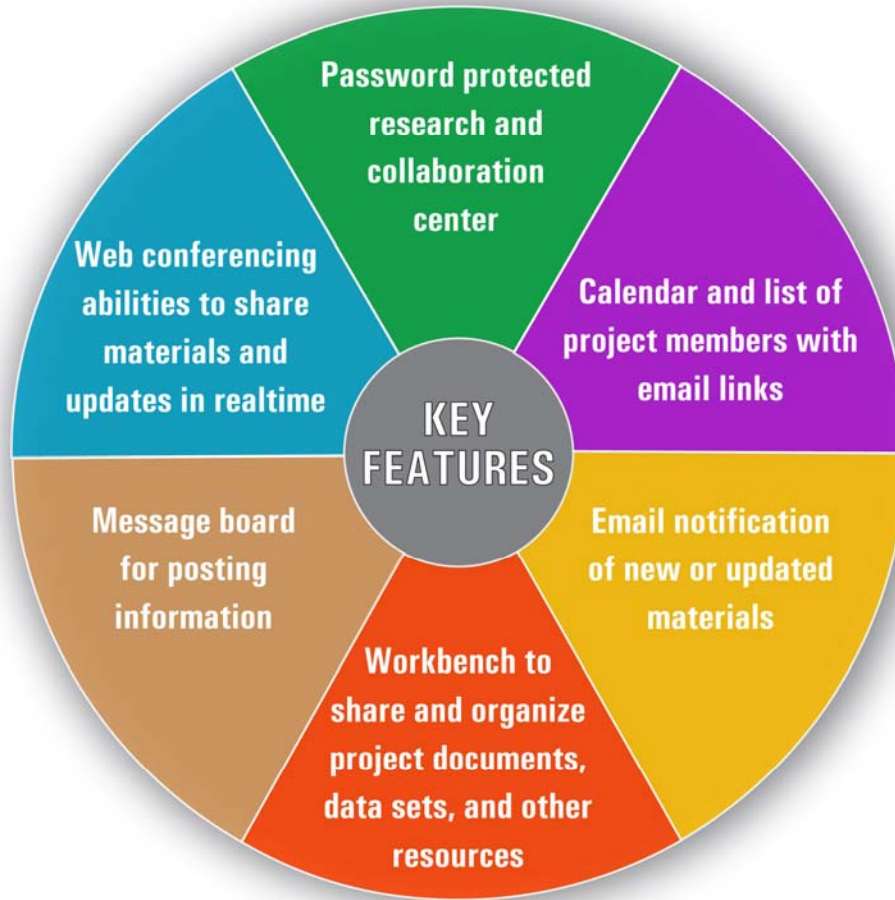
ESC Provides Solutions!

- Easy-to-create projects
- Easy access worldwide for internal or external collaborators
- One stop shop for sharing project information and conducting real-time investigation
- Document posting allows access to large files without burdening email system





Science Connector – Key Features





ESC Success Story:

Office of Pesticides Programs Risk Assessment Training Project

- Scientific Risk Assessment training provided by experts in their respective fields.
- Over 160 members, 50 International collaborators from Canada, Mexico, China, South Korean, and Australia, including other Agencies USDA, and states.
- Seminars are converted to podcasts and uploaded to this Science Connector project.
- Regulatory programs around the world are using these podcasts to train their own scientists.



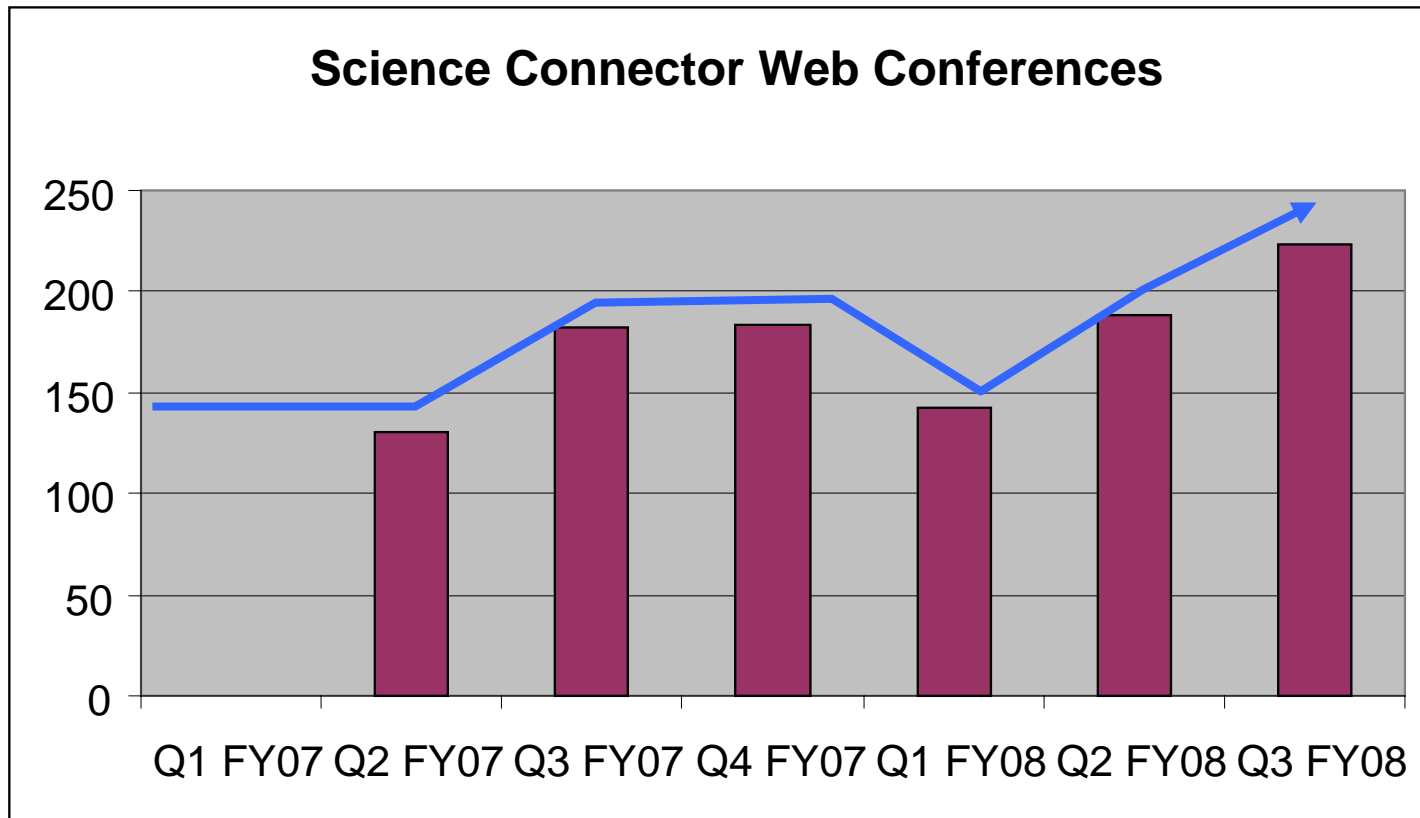
ESC Success Story:

ORD ToxCast Data Analysis Partnership

- ToxCast is an EPA program for screening and prioritizing thousands of uncharacterized environmental chemicals.
- Many outside groups help analyze the data.
- The ESC is the portal through which distribution of data and analyses is managed.
- Members: 28 participants from EPA, other US government agencies, universities, and private companies.



ESC Leveraging Portal Web Conference





ESC Use Statistics

- 345 Projects as of November 2007
- 834 Projects as of November 2008
- 55 new projects per month
- Average of 12.7 collaborators in each project, range 4-300 members
- 6,000 users, including 1,000 external EPA partners
- 1,320 distinct logins/month



EPA Portal / Science Connector: A Success Story

- ESC and Portal provides **architecture of participation** for hundreds of scientists and collaborators.
- **Users add value** through contributions to the projects and input on design and functionality.
- **Provides Web 2.0 functionality**: authoring, search, links, professional networking
- **Easy of access and use** facilitates collaboration with external partners

The Environmental Science Connector has improved the way ORD conducts research!



Newest Enhancements to ESC

Based on Input from the Agency-wide
Science Connector Steering Committee

Highlights include:

- Upload up to 5 resources at once
- Update a file associated with a resource without having to create new resources
- Search for resources within a project by name, posted date, description, and author.



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portal.epa.gov/ESC



“Collaborating for Quick Success: The HPO & INTIMA Initiatives”

Business Intelligence and Analytics Center (BIAC)

Timothy Hinds - Program Manager

US EPA



Overview

- Business Intelligence and Analytics Center (BIAC)
 - Provide enterprise leadership and perspective
 - Facilitate sharing and reuse of knowledge and experience
 - Enhance the Agency's analytic and decision-making capabilities
 - Achieve economies of scale in the implementation, maintenance, and use of BIA tools and applications
- HPO & INTIMA Projects
 - The High Performing Organization (HPO) and Information Technology Infrastructure Line of Business (ITILOB) projects leveraged the BIAC's tools and resources to develop an application for data collection, data entry, and reporting.



Project Challenges

- Quick turnaround
- Disparate data sources
- Data integrity issues
- Geographically and organizationally dispersed stakeholders & end-user community



Project Requirements

- Have collaborative workspace to keep everyone informed:
 - HPO and ITILOB project leaders
 - Project participants and their management
 - NCC Management
- Conduct business in a seamless environment
- Interact among project members regardless of physical location
- Use voice and Web conferencing to maximize efficiencies

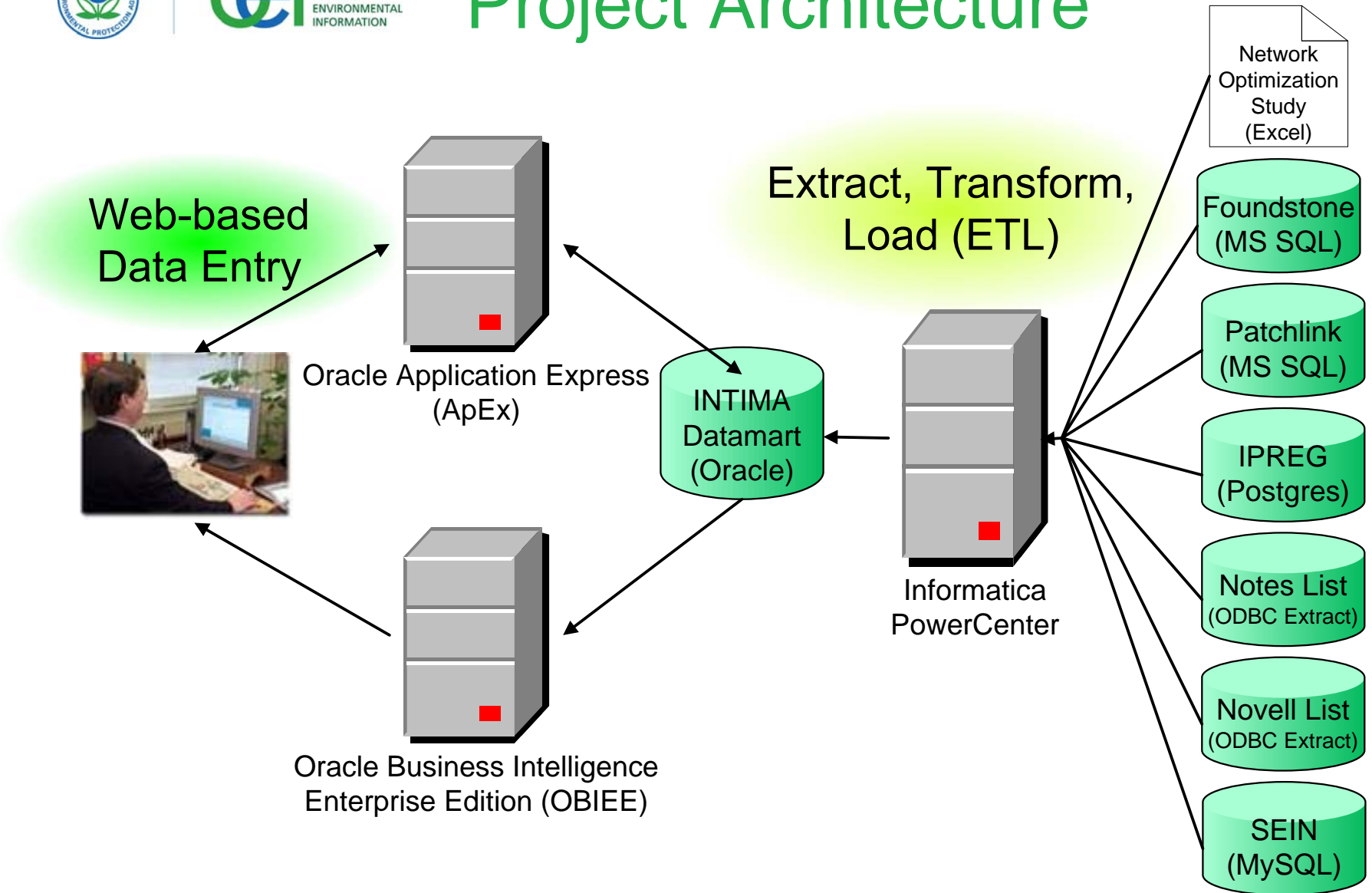


Project Approach

- The BIAC quickly built a customized application using the following Agency tools:
 - Informatica PowerCenter – Extracted, Transformed, and Loaded disparate data into a common Oracle data mart
 - Oracle Application Express – Web-based data entry tool that allowed select users to add, delete, and modify “their” data
 - Oracle Business Intelligence – Web-based dashboard & query & reporting tool that provided end-users with direct access to data



Project Architecture





Project Approach

- End-user Training & Collaboration:
 - Camtasia – used to build training videos that provided step-by-step instructions for using the HPO & INTIMA Business Intelligence & Data Entry Components
 - EPA Portal Collaborative Workspace – used to share documents and comments
 - EPA Portal Web Conferencing – used to show the recorded training, answer questions, and provide interactive technical support for the HPO & INTIMA projects.



Project Successes

- Got it done quickly & well
- Provided a single source of truth for data collection & reporting
- HPO and ITILOB Managers were enthusiastic about its data reporting outputs
- Users raved about the ease of use and robust functionality



Project Successes (con't)

- Increased ability to resolve project issues quickly
- Increased productivity by enabling working groups to share ideas and information
- Mitigated the issue of having team members geographically dispersed
- Saved money by reducing travel expenses



Recommendations

- Get Together via Portal Web Conferencing, Collaborative Workspaces, etc.
 - Do you really want to get on an airplane?
- Use Modern Tools
 - e.g., Informatica PowerCenter, Oracle ApEx, Oracle BI
 - NOT Custom Programming Code (which is so 90's!)
- Come Talk to the BIAC at Booth # 405



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Web Conferencing: Connecting People Anywhere, Anytime

Office of Solid Waste and Emergency Response

Jean Balent – Environmental Scientist
US EPA



Web Conferencing: Connecting People Anywhere, Anytime

- OSWER used the Oracle Web Conference to host several meetings, provide ad-hoc support, and increase participation in national conferences such as
 - Superfund Remedy Review Board Meeting
 - Cross Program Revitalization Measures Training
 - Federal Remediation Technology Roundtable Meeting
 - Flexiplace Support
- Proven to be an inexpensive tool to connect internal and external partners at anytime from nearly anywhere



Superfund Remedy Review Board Meeting

Need:

- bring together 20 regional and HQ experts to review info about a proposed NPL site
- **create a response document** with comments from all participants

Experience:

- 6+ hour event held online
- RPM and consultants went through PowerPoint slides and reviewed maps
- **Alternated control** to highlight various site elements to stimulate and support dialogs
- **Saved ~20K in travel expenses and 40 hrs of travel comp time**
 - Some preferred in-person meeting to commit time
- **Produced a first draft response document completely online**
 - Learned that with shared control, you cannot “cut and paste” into shared document

The screenshot displays the EPA Collaboration Suite interface for a 'Post-Conference Details: National Remedy Review Board Meeting'. The interface includes a header with navigation options like 'Home', 'Schedule', 'My Recent', and 'Archived'. The main content area shows conference details such as the start time (26-Jul-2007 9:36 AM), duration (7 Hours 18 Minutes), and attendees (20). Below this is a table of attendees and invitees, and a section for materials including pre-conference documents and conference documents.

Name	Email	Time Entered Conference	Invited or Extended	Attended	Time Entered Voice	Details
Jean Babin	Babin.Jean@epa.gov	26-Jul-2007 9:36 AM	Yes	Yes		
Linda Dietz	Dietz.Linda@epa.gov	26-Jul-2007 9:36 AM	Yes	Yes		
Linda Dietz	Dietz.Linda@epa.gov	26-Jul-2007 9:40 AM	Yes	Yes		
Jean Babin	Babin.Jean@epa.gov	26-Jul-2007 9:33 AM	Yes	Yes		
Craig Smith	Smith.Craig@epa.gov	26-Jul-2007 9:33 AM	Yes	Yes		
Dennis Faulk	Faulk.Dennis@epa.gov	26-Jul-2007 9:34 AM	Yes	Yes		
John France	France.John@epa.gov	26-Jul-2007 9:39 AM	Yes	Yes		

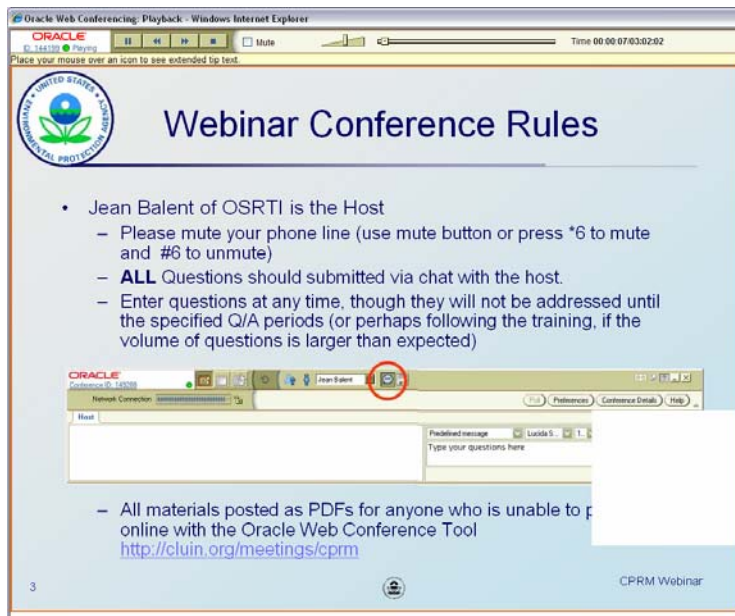
Name	File Name	File Type	Description
Draft Moses Lake Agenda	Draft Moses Lake Agenda.pdf	ISE	
Moses Lake Figure 1 v 7	Final Paperport ML Figure 1 v7.pdf	ISE	
Moses Lake Presentation	Moses Lake Wetfield Superfund Site.pdf	ISE	



CPRM Training

Need:

- train all 10 regions and HQ staff
- Powerpoint **presentation**, **PDF** workbook, and **show live data entry** into a new module in CERCLIS



Experience:

- 3 hr event with 3 speakers, 2 sets of contractors, and 1 host
- Demos and trials of Web conference held every week for 5 weeks leading up to event
- 98 simultaneous participants to Web conference, with a total body of ~300 people
- Recorded the event → **some problems with the recording, but able to replay for those that missed the training**
- Complications with physical logistics
 - Host vs Presenter PCs
 - Equipment issues
 - Too many speakers, not all were supposed to present



FRTR Bi-Annual Meeting

Need:

- Expand participation in national meeting among Fed agencies in the environmental cleanup sector
- Show **presentations, PDFs, and Web applications to remote participants that could not afford to travel**

Experience:

- 8 hr event with 15 speakers presenting to live audience as well as Web conference attendees
- 22 participants on Web conference, with a total body of ~65 people online
- Recorded entire event – assisted contractor with meeting minutes

Current Publications

- Not limited to FRTR publications
- Listed by date; most recent first
- Fact Sheet scope to expand

Federal Remediation Technologies Roundtable

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Cost and Performance Case Studies
Decision Support Matrix
Environmental Cost Engineering
Remediation Optimization
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Current Publications

Following publications have been issued under the auspices of the FRTR or FRTR member agencies. Other publications related to topics of interest to FRTR are cited, as appropriate in other sections of this web site, and many background research and technology documents (more than five years old) are available in the [distdocs](#) section.

- **Improving Remedial Effectiveness at U.S. Department of Energy through Optimization Review and Performance Basis – 6/09 (2008) Newly Posted!**
This paper, presented at the Waste Management 2008 Conference, briefly summarizes (1) the overall benefits of the U.S. Department of Energy's (DOE) Remediation Optimization Review process toward improving remedial effectiveness and efficiency at DOE, (2) the types and objectives of completed reviews, and (3) how remedial process optimization (RPO) facilitates technology transfer and is complementary to performance-based environmental management (PBEM).
[Download \(58.81KB\) PDF](#)
- **Abstracts of Remediation Case Studies, Volume 11 (2007) Newly Posted!**
This report is a collection of abstracts summarizing 10 new FRTR cost and performance case studies documenting the results and lessons learned from site remediation technology applications. The abstracts are organized by technology, and include several different technologies for treating soil or groundwater contamination or acid rock drainage, with 3 reports addressing soil cleanup, 4 reports focusing on groundwater and 3 reports focusing on treating acid rock drainage. This document also includes a table (appendix A) identifying the specific sites, technologies, contaminants, media, and year published for the 393 case studies in the FRTR database.
[Download \(1.1MB\) PDF](#)
- **Remediation Case Studies and Technology Assessment Reports Fact Sheet (2007)**
This fact sheet provides information on the remediation case studies and general technology assessment reports produced by the Federal Remediation Technology Roundtable.
[Download \(1.2MB\) PDF](#)
- **Treatment Technologies for Mercury in Soil, Waste, and Water**
This report contains information on the availability, performance, and cost of technologies for the treatment of mercury in soil, waste, and water. It includes theory, design, and operation of the technologies; provides information on availability and use, and includes site specific data on performance and cost where

Microsoft PowerPoint - [FRTR Web Conference Intro Slides.ppt]

File Edit View Insert Format Tools Slide Show Window Help Adobe PDF

AMCAP

File Devices Options Capture Help

EPA

If you have a question or comment, click the chat icon to enter your question. Jean will read it on your behalf to the speakers

Or unmute your phone line (#6) and ask the question aloud

Slide 5 of 5

Start Internet Explorer Microsoft Office AMCAP 12:21 PM



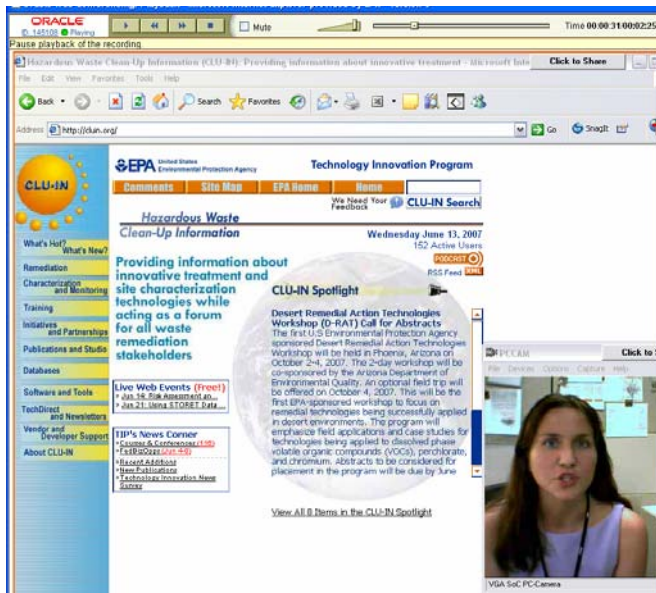
Flexiplace

Need:

- Some staff provide routine help or **assistance that can best be served in person**
- These staff also **work AWS or flexiplace schedules** to help meet Agency goals promoting these programs

Experience:

- A Web conference is scheduled in advance for the date of flexiplace
- **URL and instructions provided in out of office e-mail settings along with Lotus Notes calendar entries**
- Web conference is open to all members, placed on public calendar for easy access
- Web conference makes the **staff member as accessible** as if they were in the office
- Web conference also **keeps record of time worked** as well as partners that joined them online





Summary of Activities '08

Event Type	# of Events	# of Participants/Registrants
Training delivered via web conference	32	136
Support for other web conferences	71	911
Meetings hosted via web conference	31	216
Grand Total	134	1263

Examples of events hosted with Oracle Web Conference:

- Basic Records and Introduction to the Enterprise Content Management System (ECMS)
- Collab Tool Users - Feedback Call
- Oracle Messenger Introduction
- Oracle Web Conference Tool on the EPA Portal
- SF Remedy Review Board Hanford Superfund Site 200 ZP-1
- SF Triad Wkgrp Web Conference

For Conference Purposes Only



Outcomes and Next Steps

- Web conferencing has offered an inexpensive/free method to help connect people
- Allows participants to interact as if they were sitting side by side at the same computer
- Lead to increased participation in events
- Reduced energy expenditures, travel costs, and comp time
- Each group has returned to use the Web conference as a viable option for future events
- OSWER is continuing training, outreach and support for web conferencing to expand usage



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Questions ?

*Come See Us at the Following Booths
Locations in the Exhibit Hall:*

EPA Portal	322
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