Office of Scientific and Technical Information
Providing Energy Information at the Desktop

00-38-12-06-00

Supporting the Science Mission

- The public invests $7 billion annually in DOE R&D
- Principal output from department's R&D is scientific and technical information (STI)
- Ensures overall stewardship and accessibility for unclassified STI
- Oversees the Department's Technical Information Management Program
- Manages the world's most comprehensive collection of classified and sensitive energy-related information
- Operating Agent and the U.S. representative to the ETDE and INIS

Result–information delivered to the desktop, reaching thousands more people–at lower cost per person served

00-38-13-06-00

U.S. Secretary of Energy Bill Richardson
Fermi Awards Presentation

"For science to rapidly advance at the frontiers, it must be open. And shared knowledge is the enabler of scientific progress."

00-38-14-06-00

OSTI Resource Portfolio

Overview

http://www.osti.gov/bridge/

- Released April 1998
- Includes over 55,000 full-text DOE research reports and their bibliographic records and abstracts from 1995 forward
- Provides over 4.3 million full-text pages to users in an organized, searchable format
- Enables users to access, locate, search, retrieve, and download full-text and/or bibliographic information from their desktops
- Free access provided to the public via partnership with GPO
- 14,000 full-text downloads per month

Enhancements 2000/2001

http://www.osti.gov/bridge/

- Content projected to double
- Access to full-text documents via Persistent URL's (PURL)
- Capability to search full-text documents located at remote sites where research is performed
- Multiple downloading capabilities, date-range searching, statistical reporting enhancements, search results in user defined order

Overview

http://www.osti.gov/pubscience/

- Released October 1, 1999 in collaboration with 26 publisher partners participating with 1048 journal titles
- Provides users the capability to search a large compendium of peer-reviewed journal literature with a focus on the physical sciences and other disciplines of concern to the Department of Energy's R&D community
- 1.8 million records accessible for search and retrieval
- 1 million searches projected annually
- 7,500 visitors per week

Enhancements 2000/2001

http://www.osti.gov/pubscience/

- Customizable user interface
- E-mail alert service for new journal data based on user preferences
- Query a search engine or index a site with integrated results
- Bi-directional linking with selected publishers

Overview

PrePRINT Network

http://www.osti.gov/preprint/

- Released January 31, 2000
- A searchable gateway to preprint servers that deal with scientific and technical disciplines of concern to DOE
- Provides access to over 1000 preprint sites and more than 330,000 preprints
- Allows users to search across 24 large preprint databases via a single search interface
- 200,000 searches projected annually

Enhancements 2000/2001

http://www.osti.gov/preprint/

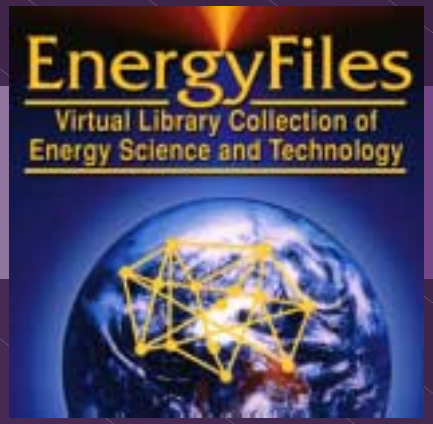
- Implementation of Web crawler technologies and options to improve the searching capabilities
- Enhanced searching capabilities, possibilities include additional fields, increased ability to modify searches, clustering, and reference linking
- Continued growth within each “Subject Pathways” section

Federally Funded Research

http://www.osti.gov/fedrnd/

00-38-22-06-00

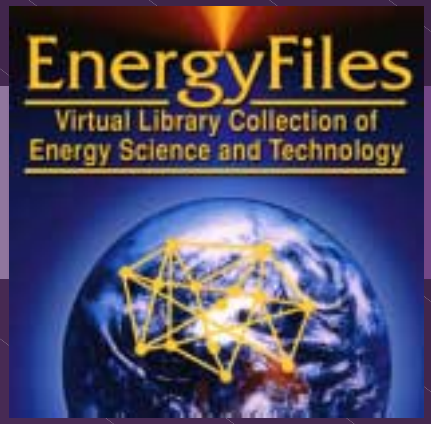
Overview



http://www.osti.gov/energyfiles/

- Released May 1997
- One-stop shopping for integrated energy, science, and technology information resources (over 500 sites)
  - High quality, driven by a collection development policy
  - Geographically-dispersed, resulting from collaborations and resource sharing
- Resources include bibliographic databases, full-text, journals, and preprints
- Maximizes worldwide access at no cost to users, including researchers, educators, students, public
- Utilization of modern technology, including a cutting-edge search mechanism - provides distributed searching across decentralized, heterogeneous resources maintained by various agencies and organizations

Building on Success



http://www.osti.gov/energyfiles/

- A Future Information Infrastructure for the Physical Sciences is now being proposed
- OSTI uniquely positioned to take the lead
  - 50 years experience
  - Core collection of 6.5 million items, journals, technical reports, preprints, books, and full-text images
  - Collaborations with 120 countries, other government agencies, journal publishers, and research organizations
  - Over 1.5 million users served annually

How Federal Agencies are Sharing Their Information

- National Institutes of Health – National Library of Medicine
- U.S. Department of Agriculture – National Agricultural Library
- U.S. Department of Education – National Library of Education
- U.S. Department of Transportation – National Transportation Library
- National Science Foundation – National Science, Mathematics, Engineering, and Technology Education Digital Library (NSDL)
- Environmental Protection Agency – EPA National Library Network

Components of a Future Information Infrastructure for the Physical Sciences

- Infrastructure
- Content
- Technology
- Science for Consumers
- Science Education
- Business Information Services

Outcomes That Will Benefit the Users

The Future Information Infrastructure for the Physical Sciences will provide:

- Well organized, comprehensive resource not limited by traditional boundaries
- Relevant information, regardless of source
- Access to both historic and current information
- Practical information about energy use
- Education for future scientists and engineers
- Easy, fast, accurate navigation through collections and resources
- Remote access to scientific hardware and software
- Provisions to accommodate users with disabilities

Future Information Infrastructure for the Physical Sciences

Meeting the Need—*Realizing the Vision*

Shared knowledge enables scientific progress

00-38-28-06-00