

A Collaborative Success

Sharon M. Jordan

Assistant Director

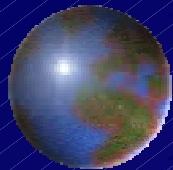
DOE Office of Scientific and Technical Information



AIMC



Columbus, OH, June 9, 2004

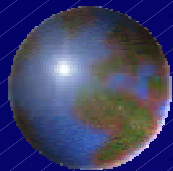


Who Is OSTI?

- Mission: Collect, preserve, and disseminate information resulting from DOE's \$8.3 billion R&D program.
- Thrust: *Make DOE Science R&D Outputs More Accessible and Better Known*



- Electronic R&D information collections used by: DOE and other researchers, academic institutions, science-attentive citizens, and U.S. industry.
- OSTI's role in DOE is similar to our counterparts in other federal agencies, i.e., CENDI.

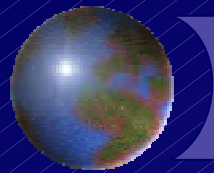


Where Are R&D Results?

Where popular search engines such as Google cannot reach



Less than 1% of government R&D results was accessible to crawlers

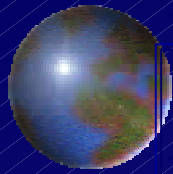


OSTI builds cornerstone for new information infrastructure

- ❖ 1999: OSTI develops EnergyPortal search



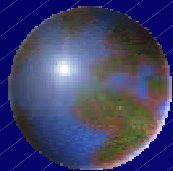
- ❖ Searched simultaneously across distributed database content via a single query
- ❖ First deep Web probe in government



Agencies have opportunity to make R&D more accessible

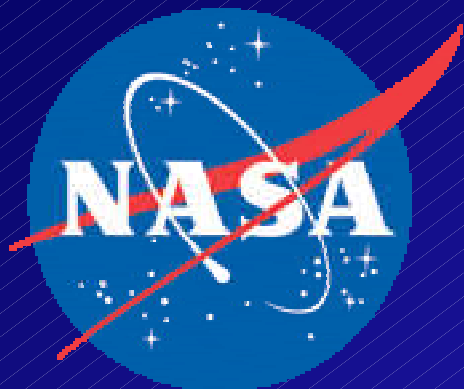
- ❖ Deep Web will continue to grow
- ❖ Huge data collections are useful only if patron knows where to find them
- ❖ Technology paired with innovation offers solutions



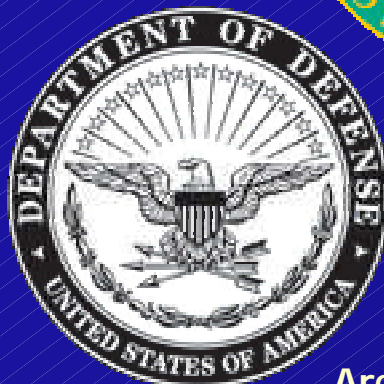


What Is Science.gov?

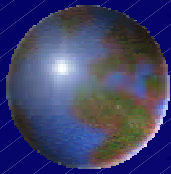
An E-gov success!



U.S. GOVERNMENT
PRINTING OFFICE
KEEPING AMERICA INFORMED

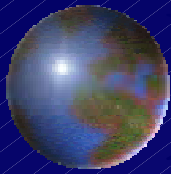


With National
Archives and Records
Administration
Support



Science.gov Is Also...

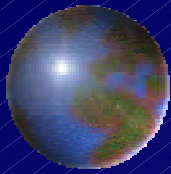
- ❖ A cross-agency gateway to one of the government's most valuable resources – its R&D.
- ❖ An Alliance of 17 information offices from 12 major science agencies
- ❖ A Web portal indexing over 1,700 resources
- ❖ A search tool, developed by OSTI, for 30 deep Web databases (with more to come!)
- ❖ A creative way to maximize the U.S. return on its R&D investment



Behind the Scenes...



- ❖ DOE convened principals
- ❖ To capitalize on new technology
- ❖ Vision: a new science information infrastructure



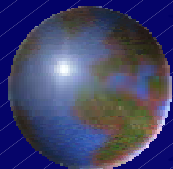
Laying the Foundation



DOE convenes first
workshop May 2000
at National Academy
of Sciences



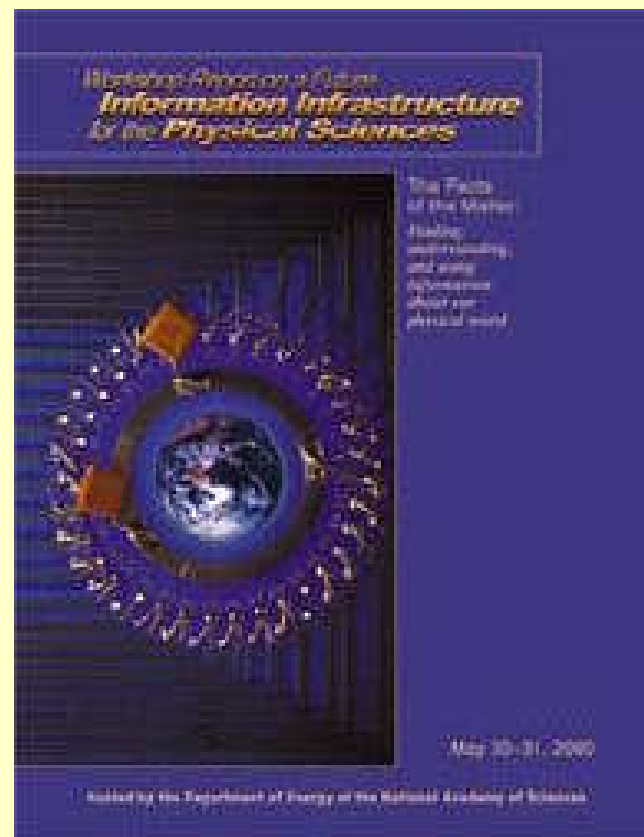
Panelists from academia,
government, and industry

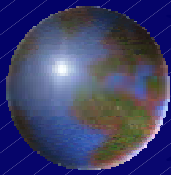


Workshop I – The Vision

- ❖ Adjust to changing modes of science communication
- ❖ Respond to call of National studies
- ❖ Enthusiastic endorsement to establish infrastructure

Trivelpiece Report -- The future science information infrastructure

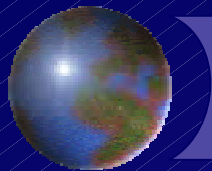




National Studies over Time

- Shared knowledge is the enabler of scientific progress
- Access to right info at the right time was goal
- Technology offered new promise to long-known problem

1945	Vannevar Bush Report to Roosevelt on science accessibility
1958	Humphrey recognizes Information Age Eisenhower issues plan
1960	COSATI established
1963	Weinburg Report - "Science, Gov't, & Information"
1965	Licklider forecasts electronic publishing
1976	NSF suggests Federal government ensure scientific communication
1983	John Crapes, Jr. describes vision for the library of the future
1989	NAS recommends an interconnected national information technology network
1991	Loken Report calls for development of a National Physics Database
1994	AAU task force examines new options for collection and dissemination of STI
1999	PITAC issues information technology report on future directions
2000	Trivelpiece Report endorses Physical Sciences Information Infrastructure (PSII)



Workshop II – The Alliance

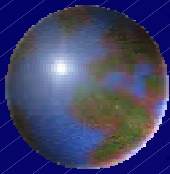
April 2001 Workshop at NIST

"Strengthening the Public Information Infrastructure for Science"

Workshop Organized by:

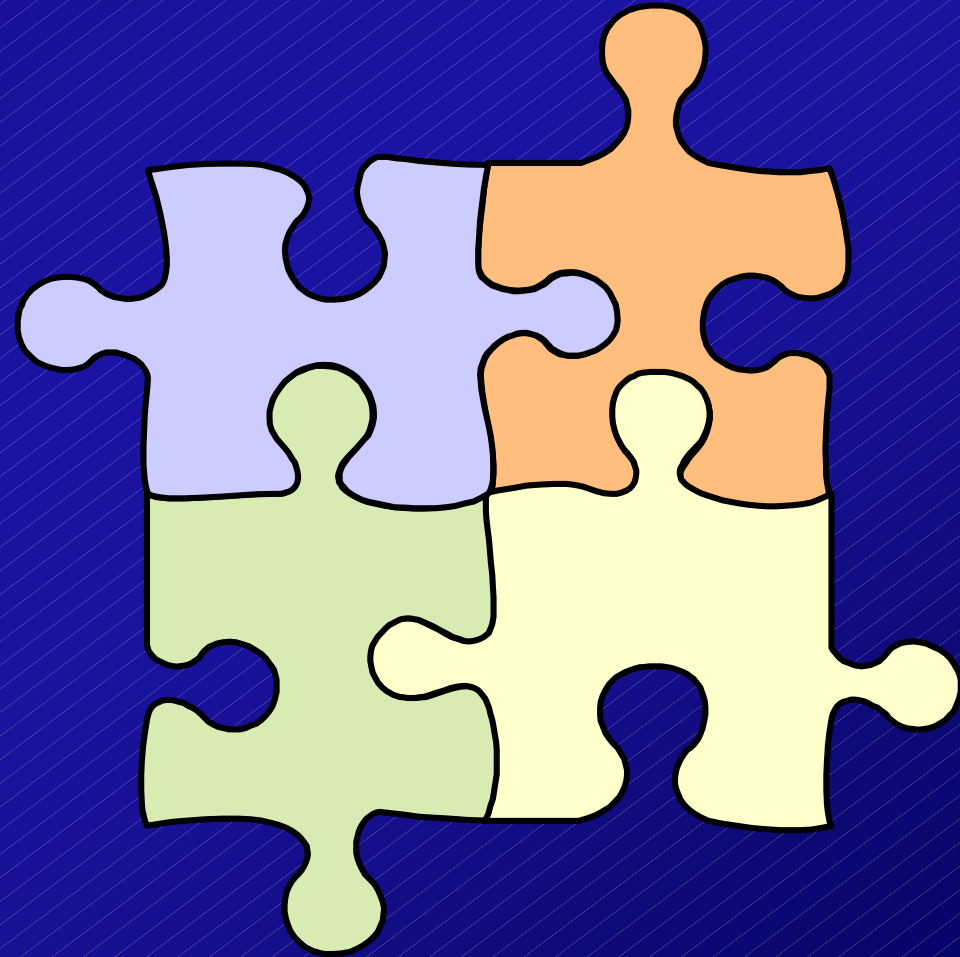
**CENDI Information Managers Group
Center for Information Policy, University of Maryland
Department of Energy
National Institute of Standards and Technology
National Science Foundation**





Shared Premise

- Web is the tool of choice
- Each science agency has information & services to fulfill its mission – to bring to Internet table
- Science is not bounded by organization or geography
- Interagency collaboration is needed

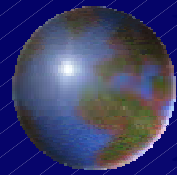




Science.gov Alliance Is Born

- ❖ Interagency science portal endorsed
- ❖ Extraordinary voluntary collaboration - without appropriated funding or legislative mandate!
- ❖ Supported e-Gov initiative
- ❖ Brought together major and often hard-to-find information collections

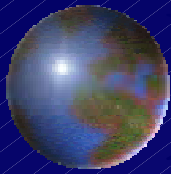




Agency “Pot Luck”

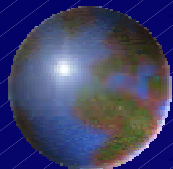
- Agencies brought to the Internet table their unique information specialties
- Arranged resources on a simple Web site
- Powered by impressive collaborative intellectual work and fabulous computer systems and software
- A credit to many contributors





Many Special Contributors

- ❖ **Science.gov Alliance and CENDI** - moved ahead without extra funding or mandates;
- ❖ **FirstGov.gov** - supported the early stages through two grants and continual advice;
- ❖ **Over 200 staff members** within member agencies - serve in many capacities;
- ❖ **Commerce's NTIS** – manages browsetree of Web sites;
- ❖ **U.S. Geological Survey** - manages the Web site search engine;
- ❖ **Information International Associates (Bonnie Carroll and staff)** - provides the central secretariat support;
- ❖ **DOE/OSTI** - conceived idea; developed technological backbone and Deep Web search; and hosts Web site.

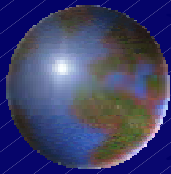


Science.gov Launched

December 2002



- ❖ Greater access to selected, authoritative U.S. R&D results
- ❖ Connected isolated islands of information via a single Web portal
- ❖ Supported President's Management Agenda



They said it, year one ...

"... makes it easier to round up scientific information that is strewn across the U.S. government's Web sites."

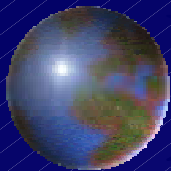
Science magazine

"... a great example of e-government in action."

*Dr. John Marburger, Director,
Office of Science and Technology Policy*

"I guarantee you will be blown away by the resources at your disposal."

Stuart Brown, Editor, Internet Science Week



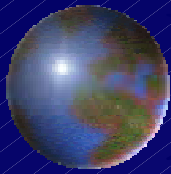
First “.gov” Street in America?



**Oak Ridge, Tennessee,
renames roadway**

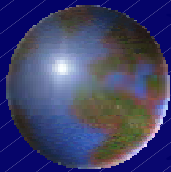
Nov. 7, 2003



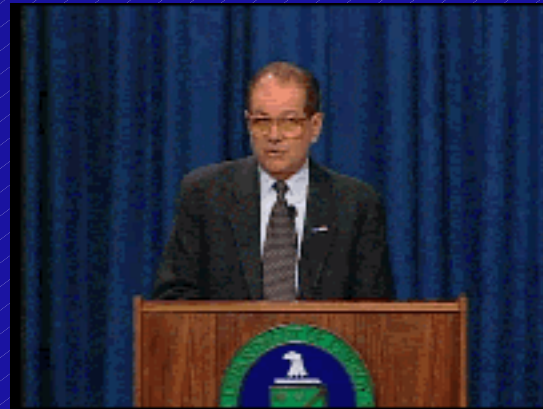


Launched May 11, 2004

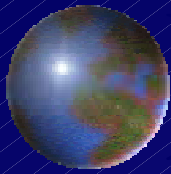
- ❖ Introduces *relevancy ranking* of search results
- ❖ Enhanced options
 - ❖ One-step search across ALL databases
 - ❖ Advanced search
 - ❖ Progress status bar



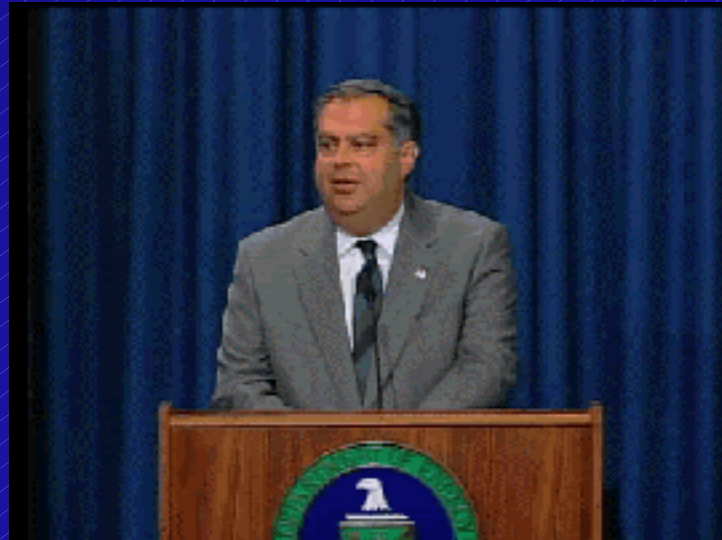
Dr. Raymond Orbach, Director, DOE Office of Science



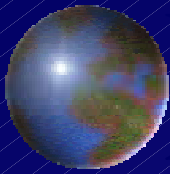
“science.gov 2.0 shares with the public in a way not possible before –the information that our country needs both for research, for industry and for education. We are able now to explore the databases that are available heretofor only by going to specific Web sites and without the relevancy weighting. It’s now possible for a student with his own PC to get a search of government databases based on their needs and ordered by the relevance to the question at hand. This will make available what cannot be achieved through the conventional search engines which only look at the Web sites. We are talking here about government databases which form a huge amount of the scientific knowledge important to our country and to our world. We’re proud of this contribution, not just for DOE’s efforts, but also for the efforts across all of the participating government agencies; and not just for science.gov’s importance for our nation, but also for our world.”



Energy Secretary Spencer Abraham

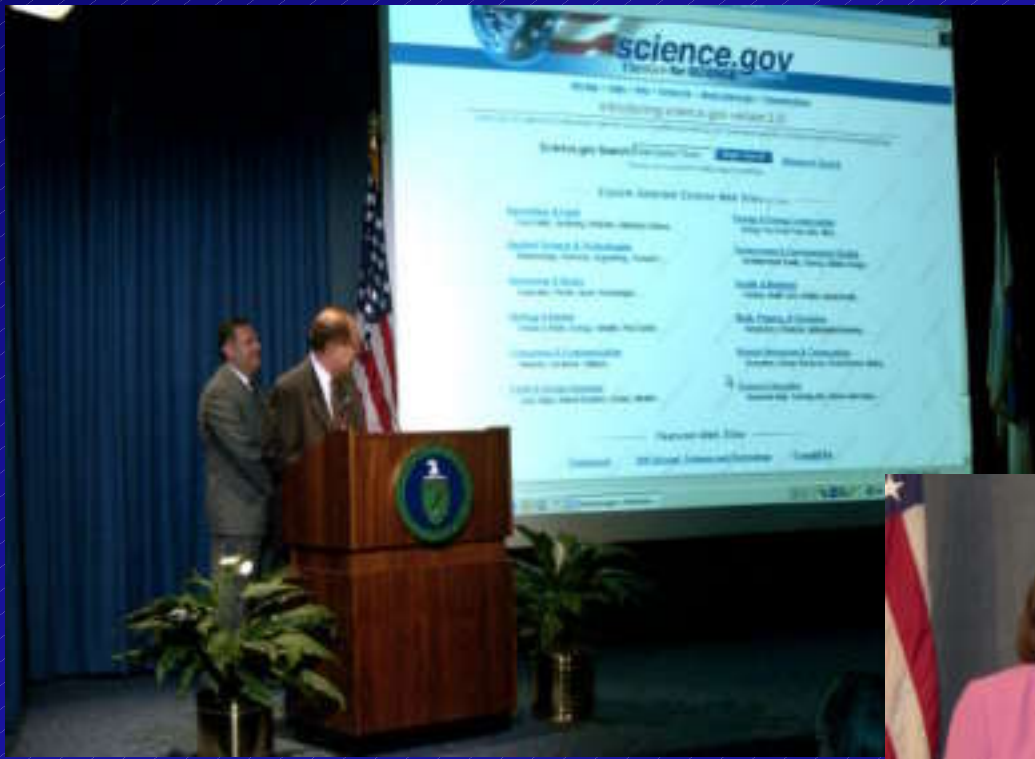


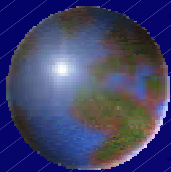
“And I would also like to thank this remarkable interagency Alliance for its continued resourcefulness and diligence in support of science.gov, and for so creatively pursuing and promoting the E-government component of the President’s Management Agenda. I am confident that this partnership will continue discovering ways to make the nation’s science knowledge base more available than ever before.”



science.gov 2.0

FIRSTGov for SCIENCE





Ranked Results Delivered to Patron

science.gov
FIRSTGov for SCIENCE version 2.0

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Science.gov is a gateway to authoritative selected science information provided by U.S. Government agencies, including research and development results.

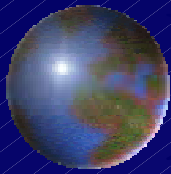
[Up](#) | [Mark All](#) | [List Marks](#) | [Clear Marks](#)  Powered by **explorit**

Enter Search Terms

Ranked results for: hydrogen fuel cell

- ★★★★** [Hydrogen Fuel Cell Bus Evaluation](#)
Document is from: AFDC (Alternative Fuels Data Center) Search Engine
- ★★★★** [Hydrogen Fuel Cell Engines and Related Technologies](#)
Document is from: NTIS Technical Reports Server
- ★★★★** [Hydrogen, Fuel Cells and Infrastructure Technologies Program, 2002 Annual Progress Report](#)
Not Available ; 2002 Nov 01
Document is from: DOE Information Bridge
- ★★★★** [Methanol hydrogen fuel cell system](#)
Struthers, R.C.
1987 Apr 21
Document is from: DOE Energy Citations Database

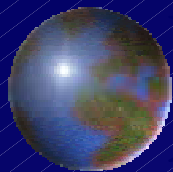
Done  Inte



Continued Collaboration

Continued Enhancement

- ❖ Version 3.0 – just a year away
- ❖ Resources – thanks to the Alliance
- ❖ Enhanced precision searching
 - ❖ MetaRank
 - ❖ Boolean and fielded searching
- ❖ Alert service individualized for patrons



A Collaborative Success!

