Federal initiatives and incentives *

Chair:
Bonnie Carroll, CENDI

Carroll introduces CENDI, a voluntary association of nine Federal information managing agencies and systems. Three projects are spotlighted that have evolved into extensive partnerships with other organizations.

Speakers:

Michael Ackerman	Assistant Director, High Performance Computing and Communications, National Library of Medicine
	The Visible Human Project
Thomas Pedtke	Associate Chief Scientist, National Air Intelligence Center
	Machine Translations: A Historic Technology Transfer Having 21st Century Impact
Anne Frondorf	Program Manager, National Biological Information Infrastructure (NBII), USGS
Gail Hodge	Senior Project Manager, Information International Associates
	NBII: Issues in Building a Virtual Library Through Cooperation

National and International Initiatives

Reports from several US government agencies and European publishers spotlight various initiatives taking place nationally and internationally to advance information's reach.

US Agency Programs

US government research and development in computing and information collection and dissemination has long been a catalyst for private sector products and services. Three projects illustrate how federal R&D efforts are stimulating breakthroughs in medical data sets, machine translation, and biodiversity thesauri.

The Visible Human Project data sets are designed to serve as a common reference point for the study of human anatomy, as a set of common public domain data for testing medical imaging algorithms, and as a test bed and model for the construction of image libraries that can be accessed through networks.

Michael Ackerman, Assistant Director for High Performance Computing and Communications at the National Library of Medicine, describes how these data sets are being applied to a wide range of educational, diagnostic, treatment planning, virtual reality, artistic, mathematical, and industrial uses by over

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*In cooperation with CENDI. Sponsored by Defense Technical Information Center.

900 licensees in 27 countries. The larger, long-term goal of the Visible Human Project is to transparently link the print library of functional-physiological knowledge with the image library of structural-anatomical knowledge into one unified resource of health information.

Machine translation just celebrated its 50th anniversary. At the center of much of the advancements in machine translation is the US Air Force and the European Commission whose "relentless support for advancement of machine translation has led to key technology transfers", says Thomas Pedtke, Associate Chief Scientist, US Air Force National Air Intelligence Center. Machine translation programs can aid both translators and information analysts. A poignant example of such technology transfer is the machine translation capability on Alta Vista.

The US Geological Survey is leading a broad, collaborative effort to develop a National Biological Information Infrastructure (NBII). Anne Frondorf, NBII Program Manager, describes the NBII as a distributed electronic federation, through which biological data from a variety of sources including federal and state government agencies, universities, natural history museums, private organizations, and others, is made more available for retrieval, integration, and application to resources management issues.

NBII partners work together in developing and adapting new tools and standards that make it easier to describe, discover, exchange, and apply biological data. Gail Hodge, Senior Project Manager, Information International Associates, has been heading up the NBII Thesaurus Project, which is a hierarchical thesaurus of terms in biodiversity and ecosystem science. This project is also addressing the differences in vocabulary content and organization structure; intellectual property and copyright issues; and archiving.