

NITRD Networking and
ITRD IT R&D

CIC computing, info and comm
HPCC and communication
HPC high-performance computing

George O. Strawn

NITRD co-chair and NCO director

NITRD and the NCO

- NITRD: an interagency program to enhance coordination and collaboration of the IT R&D that is performed and supported by Federal agencies
- NCO: National Coordination Office-- provides support for the NITRD Program, reports to OSTP, and interfaces for NITRD with OMB, GAO, Congress, etc.

Hierarchical Matters

- NITRD is co-chaired by the NSF assistant director for CISE and the NCO director
- NITRD is a subcommittee of the National Science and Technology Council's (NTSC) Committee on Technology
- NITRD is reviewed by the President's Council of Advisors for Science and Technology (PCAST)

Legislative Matters

- HPC Act of 1991, as amended by
 - Next Generation Internet Act of 1998, and
 - America COMPETES Act of 2007
- Central Provisions
 - Requires the President to establish NITRD
 - Requires the Director of OSTP to implement
 - Assigns specific functions to NITRD (e.g., coordination, prepare supplement to President's budget, etc.)

Member Agencies

DoC NOAA

DHS

DoC NIST

EPA

DoD DDRE, HPCMO

HHS AHRQ

DoD DARPA

HHS NIH

DoD Service Res Orgs

NARA

DoE SC

NASA

DoE NNSA

NSA

NSF (CISE & OCI)

NITRD Program Components

- Interagency Working Groups
 - Cyber Security and Information Assurance
 - High-End Computing
- Coordination Groups
 - High Confidence Software and Systems
 - Human Computer Interaction and Information M
 - Large Scale Networking
 - Social, Economic, and Workforce Implications
 - Software Design and Productivity
- Community of Practice: **FASTER**

NITRD Strategic Planning

- “We Compute”
- Trust and Confidence
- Education for the Cybersociety

Cybersecurity Strategic Planning

- Trust Fabrics and Subspaces
- Dynamic Defense
- Economic Incentives

FY2010 Legislative Requirements

- (ARRA) NITRD include R&D programs related to health information technology
- (COMPETES) PCAST to conduct NITRD evaluation
- (NITRD Act of 2009, pending) Director of NCO to convene a task force to explore collaborative R&D on cyber-physical systems with participation from higher ed, Federal labs, and industry

Digital Data IWG

- Harnessing the Power of Digital Data for Science and Society (Report to the Committee on Science of the NSTC, January 2009)
- “Create a comprehensive framework of transparent, evolvable, extensible policies and management and organizational structures that provide reliable, effective access to the full spectrum of public digital scientific data”

Digital Data IWG Recommendations

- Create an NSTC subcommittee for digital scientific data preservation, access and interoperability
- Lay the foundations for digital scientific data policy and make the policy public
- Promote a data management planning process for projects

The Future is Bright

- NIT R&D
 - IST R&D?
 - Informatics R&D?
- Whatever we call it, science and society depend more on it every year!
- Enhanced NIT R&D is critical to fulfill NIT's promise for society and to further the missions of our member Agencies