

Glossary

- ACCURATE** - NSF-funded A Center for Correct, Usable, Reliable, Auditable, and Transparent Elections
- AFOSR** - Air Force Office of Scientific Research
- AFRL** - Air Force Research Laboratory
- AHRQ** - HHS's Agency for Healthcare Research and Quality
- ANL** - DOE's Argonne National Laboratory
- ARL** - Army Research Laboratory
- ARO** - Army Research Office
- ARSC** - Arctic Region Supercomputing Center
- ASC** - DOE/NNSA's Advanced Simulation and Computing program
- ASC Purple** - DOE/NNSA's 100-teraflops SMP supercomputing platform
- AST** - NSF's Adaptive Systems Technology program
- BGP** - Border Gateway Protocol
- BIRN** - NIH's Biomedical Informatics Research Network
- BISTI** - NIH's Biomedical Information Science and Technology Initiative
- BlueGene** - A vendor supercomputing project dedicated to building a new family of supercomputers
- BlueGene/L** - Scalable experimental new supercomputing system being developed in partnership with DOE/SC and DOE/NNSA; expected to achieve 300-teraflops+ processing speeds
- BlueGene/P** - The next generation in the BlueGene line after BlueGene/L
- BlueGene/Q** - Latest-generation BlueGene architecture
- CaBIG** - NIH's cancer Biomedical Informatics Grid
- CAIDA** - Cooperative Association for Internet Data Analysis
- CANARIE** - Canadian Advanced Network and Research for Industry and Education
- CCIED** - NSF-supported Collaborative Center for Internet Epidemiology and Defenses
- CDI** - NSF's Cyber-enabled Discovery and Innovation program
- CENIC** - Corporation for Network Initiatives in California
- CENTCOM** - United States Central Command
- CERDEC** - U.S. Army's Communications-Electronics Research, Development, and Engineering Center
- CG** - Coordinating Group
- CIA** - Central Intelligence Agency
- CIO** - Chief information officer
- CISE** - NSF's Computer and Information Science and Engineering directorate
- CMIS** - DISA's Corporate Management Information System
- CMS** - HHS's Centers for Medicare and Medicaid Services
- CoP** - Communities of practice
- Coronet** - DARPA's CORre Optical NETworks program
- CPS** - Cyber-physical system(s)
- CREATE** - OSD's Computational Research and Engineering Acquisition Tools and Environments program
- CSIA** - Cyber Security and Information Assurance, one of NITRD's eight Program Component Areas
- CSR** - Computer systems research
- DANTE** - Delivery of Advanced Network Technology to Europe program
- DARPA** - Defense Advanced Research Projects Agency
- DDoS** - Distributed denial of service
- DETER** - NSF- and DHS-initiated cyber DEfense Technology Experimental Research network
- DHS** - Department of Homeland Security
- DICE** - Data Intensive Computing Environment
- DISA** - Defense Information Systems Agency
- DLI** - Defense Language Institute
- DNI** - Director of National Intelligence
- DNS** - Domain Name System
- DNSSec** - Domain Name System Security protocol
- DoD** - Department of Defense
- DOE** - Department of Energy
- DOE/NNSA** - DOE/National Nuclear Security Administration
- DOE/OE** - DOE's Office of Electricity Delivery and Energy Reliability
- DOE/SC** - DOE's Office of Science
- DOJ** - Department of Justice
- DOT** - Department of Transportation
- DRAGON** - NSF's Dynamic Resource Allocation (via GMPLS) Optical Network
- DREN** - DoD's Defense Research and Engineering Network
- Educause** - Non-profit organization promoting advancement of IT in higher education
- Emulab** - Network emulation testbed supported by NSF, DARPA
- ENG** - NSF's Engineering directorate
- EPA** - Environmental Protection Agency
- ESMF** - Earth System Modeling Framework
- ESnet** - DOE/SC's Energy Sciences network
- ESSC** - DOE/SC's Energy Sciences network (ESnet) Steering Committee
- EU** - European Union
- FAA** - Federal Aviation Administration
- FAST-OS** - Forum to Address Scalable Technology for runtime and Operating Systems
- FBI** - Federal Bureau of Investigation
- FCSSI** - Flight Critical Systems Software Initiative
- FDA** - Food and Drug Administration
- FDCC** - Federal Desktop Core Configuration
- FEA** - Federal Enterprise Architecture
- FIND** - NSF's Future Internet Network Design program
- FIPS** - Federal Information Processing Standard
- FIU** - Florida International University
- FY** - Fiscal Year
- GALE** - DARPA's Global Autonomous Language Exploitation program
- GEOSS** - Global Earth Observation System of Systems, a cooperative effort of 34 nations, including the U.S., and 25 international organizations to develop a comprehensive, coordinated, and sustained Earth observation system
- GMPLS** - Generalized MultiProtocol Label Switching
- GSA** - General Services Administration
- GU** - Georgetown University
- HCI&IM** - Human-Computer Interaction and Information Management, one of NITRD's eight Program Component Areas
- HCSS** - High Confidence Software and Systems, one of NITRD's eight Program Component Areas
- HEC** - High-end computing
- HEC I&A** - HEC Infrastructure and Applications, one of NITRD's eight Program Component Areas
- HEC R&D** - HEC Research and Development, one of NITRD's eight Program Component Areas
- HEC-URA** - HEC University Research Activity, jointly funded by multiple NITRD agencies
- HHS** - Department of Health and Human Services
- HPC** - High performance Computing
- HPCMP** - OSD's High Performance Computing Modernization Program
- HPCS** - DARPA's High Productivity Computing Systems program
- I/O** - Input/output
- IARPA** - Intelligence Advanced Research Projects Activity
- IC** - Integrated circuit
- ICS** - Industrial control systems
- ID** - Initial delivery

IDS - Intrusion detection system

IETF - Internet Engineering Task Force

IHEC - NSA's Integrated High End Computing program

IM - Information management

INCITE - DOE/SC's Innovative and Novel Computational Impact on Theory and Experiment program

INFOSEC - Information security

Internet2 - Higher-education consortium for advanced networking and applications deployment in academic institutions

IPsec - IP security protocol

IPv6 - Internet Protocol, version 6

ISI - Information Sciences Institute

IT - Information technology

IT R&D - Information technology research and development

IU - Indiana University

IWG - Interagency Working Group

JET - LSN's Joint Engineering Team

JETnets - Federal research networks supporting networking researchers and advanced applications development

K-12 - Kindergarten through 12th grade

LANdroids - DARPA networking R&D program

LANL - DOE's Los Alamos National Laboratory

LBLN - DOE's Lawrence-Berkeley National Laboratory

LCF - DOE's Leadership Computing Facility

LSN - Large Scale Networking, one of NITRD's eight Program Component Areas

MAGIC - LSN's Middleware and Grid Infrastructure Coordination team

MANET - Mobile ad hoc network

MAX - Mid-Atlantic eXchange

MCAR - Mixed Criticality Architecture Requirements

MCNC - Microelectronics Center of North Carolina

MIDAS - NIH's Modeling of Infectious Disease Agents Study

MPI - Message-passing interface

MURI - Multidisciplinary University Research Initiative

NARA - National Archives and Records Administration

NASA - National Aeronautics and Space Administration

NationalLambda Rail - Consortium of organizations working to provide an optical network for research

NCAR - NSF-supported National Center for Atmospheric Research

NCBC - NIH's National Centers for Biomedical Computing

NCLS - NASA's National Leadership Computing System

NCO - National Coordination Office for NITRD

NERSC - DOE/SC's National Energy Research Scientific Computing Center

NETS - NSF's Networking Technology and Systems program

NIH - National Institutes of Health

NIJ - DOJ's National Institute for Justice

NIST - National Institute of Standards and Technology

NITRD - Networking and Information Technology Research and Development

NLANR - NSF-supported National Laboratory for Applied Network Research

NLM - NIH's National Library of Medicine

NOAA - National Oceanic and Atmospheric Administration

NRL - Naval Research Laboratory

NRT - LSN's Networking Research Team

NSA - National Security Agency

NSF - National Science Foundation

NSTC - National Science and Technology Council

OECD - Organisation for Economic Co-operation and Development

OMB - White House Office of Management and Budget

OMNInet - Large-scale metro optical network testbed supported by national labs, universities, Canadian organizations, and vendor partners

ONR - Office of Naval Research

ONT - Optical networking testbed

Optiputer - NSF-funded five-year project to interconnect distributed storage, computing, and visualization resources using photonic networks

ORBIT - NSF-supported Open Access Research Testbed for Next-Generation Wireless Networks

ORCA - Online Representations and Certifications Application

ORNL - DOE's Oak Ridge National Laboratory

OSCARS - DOE/SC's On-Demand Secure Circuits and Advance. Reservation System

OSD - Office of the Secretary of Defense

OSG - Open Science Grid

OSTP - White House Office of Science and Technology Policy

P25 - Project 25, a standards development process for design, manufacture, and evaluation of interoperable wireless communications products for public safety professionals

PCA - Program Component Area

PCAST - President's Council of Advisors on Science and Technology

PF - Petaflop(s), a thousand teraflops

PI - Principal investigator

PNL - DOE's Pacific Northwest Laboratory

PSC - NSF-supported Pittsburgh Supercomputing Center

QoS - Quality of service

QuERIES - DoD's Quantitative Evaluation of Risk for Investment-Efficient Strategies program

R&D - Research and development

RF - Radio frequency

RFID - Radio frequency identification

RTOS - Real-time operating system

SAFE - NSF-supported Situational Awareness for Everyone center

SAPIENT - NSF's Situation-Aware Protocols In Edge Network Technologies program

SATCOM-CX - DARPA-supported SATellite COMmunications research program

SCADA - Supervisory control and data acquisition

SCAP - Security Content Automation Protocol

SciDAC - DOE/SC's Scientific Discovery through Advanced Computing program

SDP - Software Design and Productivity, one of NITRD's eight Program Component Areas

SEBML - NSF's Science and Engineering Beyond Moore's Law program

SEW - Social, Economic, and Workforce Implications of IT and IT Workforce Development, one of NITRD's eight Program Component Areas

SING - NSF's Scientific Foundations for Internet's Next Generation program

SIP - Session Initiation Protocol

SoS - Systems-of-systems

SPRUCE - Systems and Software Producibility Collaboration and Evaluation Environment

StarLight - NSF-supported international optical network peering point in Chicago

State - Department of State

SUP - Secure unattended proxy

SVP - Secure virtualization platform

TCIP - NSF-supported Trustworthy Cyber Infrastructure for the Power grid

TeraGrid - NSF's terascale computing grid

TF - Teraflop(s), a trillion floating point operations (per second)

TLCC07 - DOE/NNSA's Tri-Laboratory Linux Capacity Cluster

TPM - Telepresence mode

Treasury - Department of the Treasury

TREC - Text RETrieval Conference

TrUST - DARPA's Trusted, Uncompromised Semiconductor Technology program

TRUST - NSF's Team for Research in Ubiquitous Secure Technology
TSWG - Technical Support Working Group
TTCP - The Technical Cooperation Program
UCAR - University Corporation for Atmospheric Research
UIC - University of Illinois at Chicago
UIUC - University of Illinois at Urbana-Champaign
ULS - Ultra-large-scale systems
UMd - University of Maryland
UNC - University of North Carolina
USDA - U.S. Department of Agriculture
USGS - U.S. Geological Survey
UU - University of Utah
UW - University of Washington
UWisc - University of Wisconsin
V&V - Verification and validation
VINI - NSF-supported Virtual Network Infrastructure program
VPN - Virtual private network
VSTTE - Verified software, theories, tools, and experiments
WAN - Wide area network
XBRL - eXtensible Business Reporting Language
XML - eXtensible Markup Language
XT4 - HEC system at DOE/SC's National Energy Research Scientific Computing Center