



Researchers, educators and students at institutions connected to the NYSERNet R&E Network have access to a high-performance, state-of-the-art network with capacity to support such high bandwidth applications as: large-scale data transfers, distributed computing, distance learning, videoconferencing, tele-immersion, interactive teaching, virtual laboratories, and digital libraries.

The R&E Network rides on a statewide optical transport system deployed on dark fiber that is owned, lighted and operated by NYSERNet. The Network employs gigabit Ethernet technology and offers points of presence (PoP) in Buffalo, Rochester, Syracuse, Binghamton, Albany and New York City. Participating institutions throughout the state connect to the network at one of these six regional PoPs, generally at speeds of 200 Mbps or more, primarily using metro or long-haul dark fiber.

Institutions eligible to participate in the R&E Network include all not-for-profit and government entities, as well as for-profit research laboratories that have a research relationship with existing participants. Currently, the network serves nearly 200 universities, elementary and secondary schools, hospitals, museums, libraries and other research institutions, including the following:

Albert Einstein College of Medicine
American Museum of Natural History
ARTstor
Bard College
Binghamton University
Canisius College
City University of New York
Clarkson University
Columbia University
Cornell University
Daemen College
Eastern Suffolk BOCES
Hofstra University
IBM Watson Research Lab
Le Moyne College
Manhattan School of Music
Marist College
Monroe #1 BOCES

Mt. Sinai School of Medicine
New York Public Library
New York University
Pace University
Rensselaer Polytechnic Institute
Rochester Institute of Technology
Stony Brook University
SUNY College at Geneseo
SUNY College at Potsdam
SUNY Upstate Medical University
Syracuse University
The New School University
The Rockefeller University
University at Albany
University at Buffalo
University of Rochester
Weill Medical College of Cornell
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The NYSERNet Network offers egress to other national and international research networks primarily via NYSERNet's Manhattan colocation facility. There it exchanges traffic directly with Internet2's national R&E network, ESnet (the U.S. Department of Energy's Energy Sciences Network) and CA*net 4 and TWAREN (the Canadian and Taiwanese national R&E networks). For redundancy purposes, NYSERNet also connects to Internet2's national network in Buffalo.

NYSERNet is a private not-for-profit corporation created to advance science and education in New York State. Founded in 1985 by a consortium of visionary public and private New York State institutions, it provides high-speed network connectivity to advance research and educational initiatives in the Empire State. In 2003, implementation of a dark fiber project was begun to provide cost-effective access to institutions in New York City. The success of the NYC Metro Fiber project was followed by the April 2005 launch of the statewide optical network employing DWDM. Both these projects are examples of NYSERNet's continuing success in providing technically advanced communications facilities to its member institutions at a sustainable cost.

www.nysernet.org