

## New York University is the First End Site in North America With Global Native Ipv6 Multicast Connectivity

New York, NY, Sept 14, 2005 New York University (NYU) today announced that it has begun providing native IP Version 6 (IPv6) multicast connectivity between its campus and the global Ipv6 Internet. Until recently, most network backbones did not support Ipv6 multicast, and end sites were required to "tunnel" their multicast connections by placing their multicast data packets inside conventional, unicast packets and sending them to an Ipv6 multicast service provider. The growing worldwide network of tunnels collectively known as the m6bone ([www.m6bone.net](http://www.m6bone.net)) has existed over the past several years, and is now beginning to be replaced by native connections. In an Ipv6 network design and engineering effort with NYSERNet, NYU has connected its campus to the worldwide multicast network via a Gigabit Ethernet link and Ipv6 multicast routing protocols without the use of tunnels. This milestone event represents the first time in North America that an end site has held native global Ipv6 multicast connectivity, and is a significant evolutionary step in the growing deployment of Ipv6 multicast connectivity.

As Ipv6 unicast and multicast communications develop within the industry, NYU is actively researching the use of Ipv6-enabled applications and network services. Technologies such as DVIP (Digital Video over IP) and Conferencing are two examples of technologies being explored for use with Ipv6 multicast. At the network level, the impact of relatively new multicast technologies on network infrastructure, such as SSM (Source-Specific Multicast) and Embedded RP (multicast routing Rendezvous Point) is being evaluated, and testing is underway in support of production service and academic research.

NYU has been designing and implementing Ipv6 networks since early 1997, as one of the first universities to establish a connection to the 6bone: the world's first global Ipv6 unicast network, also implemented with tunnel-connected end sites. This most recent Ipv6 accomplishment was achieved as part of an ongoing collaboration between NYU and NYSERNet. NYSERNet provides NYU with high-bandwidth research network connectivity through its statewide optical network and global connections through networks including Internet2's Abilene and CANARIE's CA\*Net 4. NYSERNet has been offering Ipv6 multicast services over tunnels for the past two years, and as part of this initiative, has begun providing native connectivity as well. Over the NYSERNet network, NYU researchers can use Ipv6 and Ipv4 with equally high performance to reach their collaborators anywhere in the worldwide research community. Native Ipv6 multicast access for NYU now brings this service on par with the high performance native Ipv4 multicast connectivity NYU currently receives from NYSERNet.

The principal technology lead at NYU for Ipv6 is Jimmy Kyriannis.

About NYU New York University ([www.nyu.edu](http://www.nyu.edu)), located in the heart of Greenwich Village, was established in 1831 and is one of America's leading research universities and a member of the selective Association of American Universities. It is one of the largest private universities in the US and a leader in attracting international students and scholars in the U.S.; it sends more students to study abroad than any other U.S. college or university. Through its 14 schools and colleges, NYU conducts research and provides education in the arts and sciences, law, medicine, business, dentistry, education, nursing, the cinematic and performing arts, music, public administration, social work, and continuing and professional studies, among other areas.

About NYSERNet NYSERNet is a private New York State not-for-profit corporation created to foster science and education in New York State through advanced network technologies and applications. An Internet pioneer, NYSERNet has delivered next-generation network services to New York State's education and research community for twenty years. More information about NYSERNet can be found at <http://www.nysernet.org>.