Robust Data Network Provides a Solid Framework for Digital Communication

Students, faculty and staff of Texas A&M University are connected to each other, the Internet, national education and research networks and The Texas A&M University System by Texas A&M’s local-area network and the TTVN wide-area network.

TTVN provides high-speed intranet connections among all campuses in the A&M System and a reliable connection to the Internet. TTVN also provides high-speed access to the national and international research and education networks, including Internet2 and National LambdaRail (NLR). Reliability is a critical facet of TTVN’s infrastructure. Collaboration with The University of Texas System (UT) created a shared redundant backbone ring. This means no single fiber cut or failure can interrupt service. This collaboration also provides both Texas A&M and UT with two Internet service providers, giving additional protection against external failures. To meet the needs of both Texas A&M and UT customers, the bandwidth of these services will double from 10 to 20 Gigabits per second (Gbps) in Fall of 2011.

The campus local-area network provides high-performance, reliable connectivity with campus computing systems and the Internet. This core infrastructure supports office computers, research labs, instructional systems, business applications and utilities. A 10 Gbps backbone provides ample data flow across campus and to TTVN. Campus buildings are connected to the backbone with 1 or 10 Gbps connections. Within buildings, desktops and servers connect at speeds up to 1 Gbps. Wi-Fi network access is available in all student areas and most buildings. The campus backbone interconnects with a community network to extend campus services to all A&M offices in Bryan and College Station.

These networks facilitate a wide variety of collaboration both on and off campus for faculty, students and staff. Email, videoconferencing, webconferencing, eLearning and the Howdy web portal all run on these networks to facilitate teaching, learning research and administration.

As technology improves, and mobile devices increase in popularity, digital collaboration will continue to grow. The networks for the A&M System are meeting the current demand and Texas A&M continues to increase capacity to meet the future collaboration needs of our students, faculty, and staff.