SURA Video Development Initiative

The SURA Video Development Initiative (SURA ViDe) was established in March 1998 to promote and develop functional, standards-based and scalable video systems (both video-on-demand and video conferencing) for use in the higher education environment. The impetus for the creation of the initiative was a determination to leverage collective expertise and resources to influence vendor direction and accelerate standards development to meet the demand for campus desktop video and video conferencing. The goal of SURA ViDe is to attempt to address those issues that have slowed the adoption of video technologies in higher education – high cost, volatile standards, and lack of interoperability – and thus foster collaboration and sharing of information between institutions.

SURA ViDe is composed of representatives from The Georgia Institute of Technology, The University of North Carolina at Chapel Hill, The University of Tennessee, Knoxville, and North Carolina State University. NYSERNet (New York State, Educational and Research Network) is partnering with SURA ViDe in its efforts.

SURA ViDe is currently approaching completion of Phase I. Funded by The Southeastern Universities Research Association (SURA), Phase I has focused on the specification of optimum video-on-demand and video conferencing systems, the establishment of relationships with vendors willing to refine their products to meet those specifications, and the preparation and release of recommended practices/standards for video systems to SURA member institutions. The deliverables in Phase I are a white paper on video-on-demand specifying best practices, providing methodologies, and identifying vendors able to support highly functional and scalable VOD systems, and a Video Conferencing Cookbook (Version 1.0), targeted at both the end user and integrator.

Phases II and III of the initiative will entail the implementation and deployment of the selected video systems. Implementation will enable and promote collaborative research, distance learning, and the sharing of multimedia resources among SURA institutions.

Some examples of planned applications of the selected technologies at the participating institutions are:

- **Georgia Institute of Technology:** GIT is pursuing the use of standards based video conferencing and video-on-demand for various specific projects as well as for general purpose use. For example, Georgia Tech and Emory Libraries have received a $1.5 million grant from a local foundation to fund the SAGE project. SAGE (Selected Archives of Georgia Tech and Emory) is a collaboration between the two libraries to develop and showcase multimedia digital library capabilities using significant collections from both libraries. One testbed project, currently in development, will use digital speech processing technology to provide keyword indexing of digital audio and video files. The Georgia Tech and Emory Libraries are collaborating with the Georgia Tech Digital Signal Processing Laboratory (EE-DSP) and the Georgia Tech Interactive Media Technology Center (IMTC) to develop a database of the speeches of Senator Sam Nunn, digitized from video and audio tapes and indexed through a phoneme-recognition speech processing program, developed by EE-DSP.

  In addition, GIT is one of nine participants in *The SEPSCoR High Bandwidth Application Test* project, which will likely use video conferencing as one component of the application to deliver high performance computing training courses across Internet2, on nine different parallel computing platforms housed at nine different institutions in the SURA region.

- **The University of Tennessee, Knoxville:** UTK anticipates the h.323 client will become the video conferencing system of choice among users of our high speed research networks. One application currently under development with the UT College of Veterinary Medicine will utilize h.323 technologies for the sharing of live animal clinical cases between three colleges of veterinary medicine in the Southeast. UTK is also currently pursuing the deployment of video-on- demand on

campus, enabling delivery of instructional and other videos to the desktop in classrooms, labs and dorms. Currently, three pilot video-on-demand projects are underway with the College of Veterinary Medicine, UTK Libraries and the Dept. of Ecology and Evolutionary Biology. UTK is also participating in the aforementioned *The SEPSCoR High Bandwidth Application Test* project.

- **The University of North Carolina, at Chapel Hill:** At UNC, CH, The Center for Advanced Video Network Engineering and Research (CAVNER) has plans to create an MPEG multicast and VOD Internet2 broadcast station in the near future, and also support h.323 teleconferencing in multiple disciplines, including Physics, Social Work and Communication Studies.

In addition, SURA ViDe is represented on the steering committee of the recently launched Internet2 Digital Video Network.

More information can be found at the SURA ViDe website <http://vide.utk.edu/> or by contacting Tyler Miller Johnson, Technical Chair <Tyler_Johnson@unc.edu> or Mairad Martin, Administrative Chair <maireadm@utk.edu>.

For further information on the GIT and Emory Libraries' SAGE project, contact Miriam Drake, Director of Libraries, Georgia Institute of Technology, <miriam.drake@library.gatech.edu> or the project managers, Grace Agnew, Assistant Director for Systems and Technical Services <grace.agnew@library.gatech.edu> and Naomi Nelson, Nunn Archivist, Emory University Library <libnn@emory.edu>.