ADaPT • Association for Dance and Performance Telematics

Mission Statement

ADAPT is an interdisciplinary association of artists, technologists and scholars from five educational institutions dedicated to research and critical dialogue on performance and media in telematic space.

The objectives of ADaPT are to:
create a site for telematic collaborative inquiry for the purpose of developing new models of practice and training techniques for the creation of networked dance and performance,
develop a shared mediated space for investigating performance and creative collaboration through a distributed environment across time zones,
situate research within a larger cultural and political context that acknowledges how mediated performances both frame and are framed by issues such as identity, privilege and access.

This inter-university research group consists of five core centers; Arizona State University, the University of California Irvine, Ohio State University, the University of Utah and the University of Wisconsin, Madison.

Members
Arizona State University
John D. Mitchell, ADaPT chair
Department of Dance/Institute for Studies in the Arts
Naomi Jackson,
Department of Dance
Mila Parrish
Department of Dance
Sam DiGangi
Information Technology, Instructional Support
Angel Jannasch-Pennell
Information Technology, Instructional Support

University of California Irvine
Lisa Naugle
Department of Dance
Alan Terricciano
Department of Dance

Ohio State University
Johannes Birringer
Department of Dance

Tim Glenn
Department of Dance

University of Utah
Ellen Bromberg
Department of Dance
Jimmy Miklavic
Center for High Performance Computing
David Zemmels
Assistant to the Dean of Fine Arts, Department of Theater

University of Wisconsin, Madison
Douglas Rosenberg
Inter-Arts and Technology
Chris Dowling
Center for Instructional Media

Dartington College, UK
Scott deLahunta

ADaPT - a technical history.

ADaPT began under the auspices of a program of the National Science Foundation to link universities to high speed networks which began at Arizona State University in 1999. This initiative initially brought high-speed networks to portions of many major universities across the US. The first ADaPT meeting, at Arizona State University in 1999, was held for two reasons. The first was to bring together professional artist/educators from five major universities with Internet 2 service and provide a seminar, discussion and hopefully a decision to use this newly accessible technology for art making. The second reason was to make sure that each artist was paired with an information technology specialist, someone who could insure that the new, high-speed service would be available to the dance program at each university.

The information technology group from Arizona State University made a presentation on the technical elements and potential of I2, and the work group drew up the original goals and objectives of the Association for Dance and Performance Telematics.

The original video/audio streaming communications were achieved through the Mac-based software Sorenson Broadcaster. A list serve and chat group were set up to serve as a communication point and, through chat, a means of organizing online sessions in real-time. After two generations of development, Sorenson Broadcaster was incorporated into Apple's Quicktime and the ADaPT group then adopted Quicktime Broadcaster as it's main communication platform. Member sites have often used multiple machines to bring in and project video streams from several partner sites at once. Often video mixers and switchable routers are used to create narrative montages from several remote inputs. Recently a new streaming software, the cross platform DVTS, has begun to gain popularity among the group.

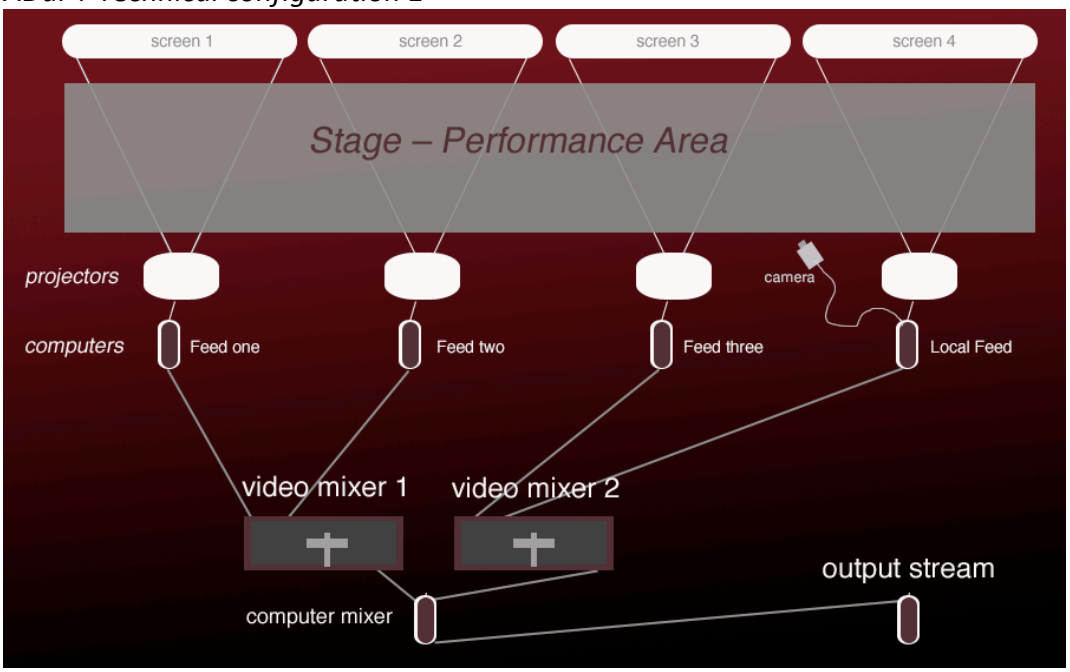
Beginning in 2003 ADaPT members began experimenting with the use of UDP data streams to connect remote sites. Using Open sound Control, a plug-in for MAX/MSP, member sites could use motion sensing input from partner sites to control media in their site such as video, lighting, sound or image playback. This development is in the beginning stages, and could easily extend to linked stage performances that are largely automated based on user/viewer input. This input extends to the possibility of incorporating home, web viewers into the performance arena.

ADaPT Technical description Part Two

Some common technical set ups for ADaPT member sites

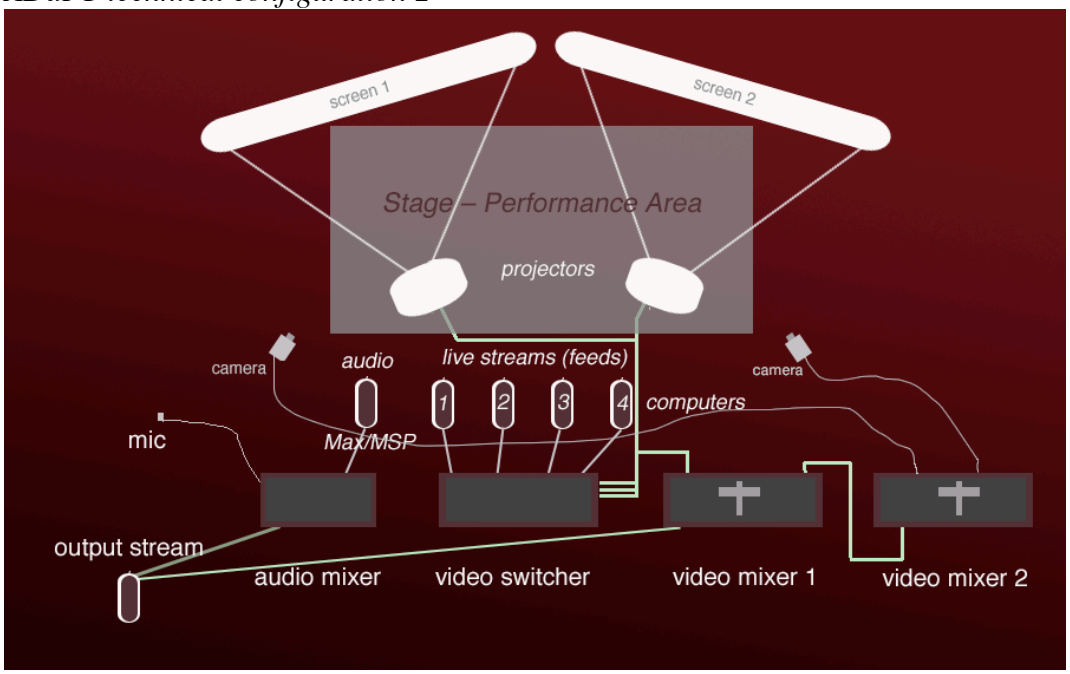
One possible configuration for ADaPT members is to have a screen for as many incoming video streams as possible, and display all of the incoming streams all or most of the time. In the configuration pictured below two video mixers have been added, which enables this site to remix incoming feeds with local video and send the mix back out as a new stream.

ADaPT Technical configuration 1



Another common practice is to bring all streams into a switcher and then switch to the desired stream as needed. In the following example, four streams are fed into a switcher and then sent, one at a time, into a video mixer where the selected stream can be mixed with local cameras. Two local cameras are also sub mixed in another video mixer. An audio mixer is used to combine voice with computer-generated sound coming from a Macintosh computer running the software, MAX/msp.

ADaPT technical configuration 2



In the third example, partner video/audio streams are brought into a switcher and selected, one at a time, for projection onto a the large screen. (This is to permit interaction with local performers.) The streams are also fed to video monitors, where they are constantly visible to the viewing audience. Local cameras can also be switched to the large projection screen or to any or all of the monitors.

A computer is dedicated to processing incoming video. This video can be from a remote or local source. Once this video is processed, it is sent out with audio as a media stream. Local or remote camera feeds can also be analyzed by the processing computer, and the resulting motion or presence data sent to partner sites as in the *Viroid Flophouse* project.

ADaPT technical configuration 3