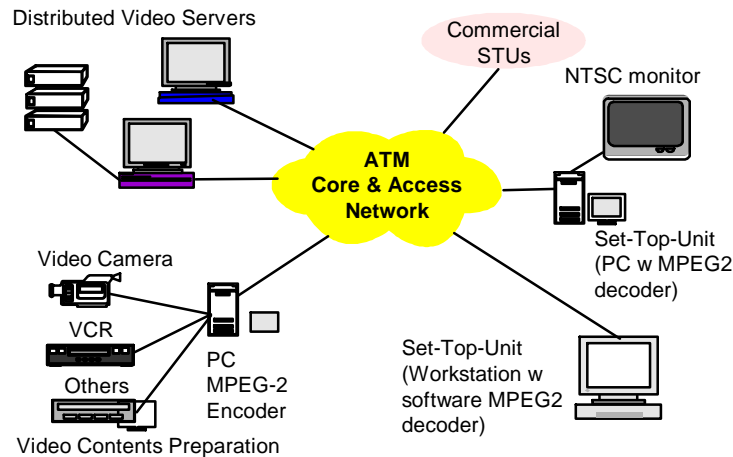


Digital Video Over ATM Networks



Goal

To foster interoperability of digital video products and services over ATM networks.

Technical Objectives

- Develop a reference implementation of DAVIC compliant Video-on-Demand (VoD) system (set-top units and video servers) for interoperability testing.
- Develop conformance and interoperability testing methodologies and test suites for testing of DAVIC compliant VoD systems.
- Study the QoS requirements for transport of digital video data over ATM Networks.
- Study the characteristics of variable bit rate MPEG2 compressed video sources.

Impact

- Use of test tools improves the interoperability of VoD products.
- Knowledge of QoS requirements and traffic patterns improves support of digital video over ATM networks.

Customers and Collaborators

Customers

- DAVIC members including equipment vendors, network operators, content providers and consumers
- Universities and research institutes.
- Standard organizations: ISO/IEC JTC1, SMPTE, and ANSI NCITS

Collaborators

- Columbia University
- Korean Telecomm, and Electronics & Telecommunications Research Institute, Korea.
- Bellcore, Bell Atlantic.
- Advanced Technology Program, NIST

Accomplishments

- Participated in a DAVIC interoperability test event at Columbia University with participants from 4 countries. (FY 96)
- Completed a reference implementation of DAVIC VoD system which allows remote testing through Web access. (FY 96-97)
- Completed the Conformance and Interoperability section of the DAVIC v1.2 Specifications. (FY 97)
- Completed a test suite for MPEG2 part 6 (DSMCC) which was included in ISO/IEC MPEG2 standard part 10. (FY 97-98)
- Developed a test tool for the above DSMCC test suite. (FY 98)
- Completed QoS testing of a VoD system with Bellcore over wide area ATM network between Gaithersburg, MD and Morristown, NJ (FY 97-98)
- Developed a variable bit rate MPEG2 traffic source model (the GOP GBAR model) and incorporated it into the NIST ATM Simulator. (FY98-99)