

Access to the USC Shoah Foundation Institute's Visual History Archive via Internet2 Overview

The Institute's Visual History Archive at the University of Southern California (USC) contains nearly 52,000 video testimonies collected in 32 languages and 56 countries. 105,000 hours of video occupy 135 terabytes of storage on servers at USC. The Institute interviewed Jewish survivors, homosexual survivors, Jehovah's Witness survivors, liberators and liberation witnesses, political prisoners, rescuers and aid providers, Roma and Sinti survivors (Gypsy), survivors of Eugenics policies, and war crimes trials participants.

The Institute currently provides secure digital access to the fully indexed and digitized archive to a small number of institutions in the United States and abroad. Our current domestic partners include Brown University, Columbia University, Duke University, Florida Atlantic University, North Carolina State University, Rice University, Stanford University, Syracuse University, Texas A&M University, the United States Holocaust Memorial Museum, University of Michigan, University of Minnesota, University of North Carolina at Chapel Hill, University of California at San Diego, and University of South Florida. Outside of the United States, access to the entire archive is also available at Central European University in Budapest, Hungary, Freie Universität Berlin in Germany, Technische Universität Berlin—Zentrum für Antisemitismusforschung in Germany, and Monash University in Melbourne, Australia.

Visual History Archive via Internet2

Institutions connected to Internet2, or an equivalent network in the country in which they are located, may collaborate with the USC Shoah Foundation Institute to access the entire Visual History Archive. Connection via Internet2 ensures efficient and optimal access to nearly 52,000 testimonies – the complete archive to date.

Students, faculty and researchers at participating universities access the archive through a browser-based interface (the Visual History Archive or VHA) that communicates with servers at USC via Internet2. The web servers and database servers exist at USC, along with the main video archive, while a designated video server of at least 1 TB is needed locally at the connecting institution to act as a video "cache" to stream video to the search interface. Access to the browser-based interface is limited by IP address ranges at each connecting institution. Please see the last page of this document for a basic diagram of the system architecture.

Users are able to search more than 50,000 experiential and geographic indexing terms to find relevant video in the archive. The web-based search tool allows users to identify both whole testimonies of relevance as well as specific segments within testimonies that relate to their area of interest. The tool also allows searching by biographical data including gender, city and country of birth, religious affiliation, and by names of all people – interviewees, as well as the names they reference.

To date, educators have used the archive to incorporate testimonies in over 130 university courses across many disciplines, including anthropology, business, film, history, law, linguistics, sociology, and psychology. During 2008, more than 20,000 user sessions were logged by nearly 1800 unique users.

Local Technical Requirements

- Institution must be connected to Internet2 or the equivalent network in the country in which it is located.
- 100 mbps connectivity to Internet2 or equivalent network required
- Institution must set up a designated video server which should have a Gigabit Ethernet connection as close to the Internet2 peer as possible to minimize local bandwidth issues
- Institution must have set up a designated video server (cache) of at least 1 TB to store a subset of the digital video files in the Visual History Archive. The average digital size of a testimony is 3 GB. Our experience has shown that a larger local video cache provides a better user experience since more videos are available for immediate viewing
- User desktops have at least 10 mbps switched connectivity to the cache to play the video
- Institution must have high-speed Internet access
- Institution must set up the Visual History Media System (VHMS) on the cache. For basic cache operation, the following is required:
 - Linux operating system
 - Open SSH with the PSC performance patches installed
 - SAMBA or native Windows SMB (VHA caches only)
 - Perl 5.8.0 or above
- For monitoring and tuning cache performance:
 - Bandwidth Test Controller (BWCTL)
 - Web100 TCP Tuning
 - It is recommended that a version of Linux that does auto-tuning is used, for example, 2.4.26, 2.6.6, or above. Internet-2 recommends 2.6.12 as some kernels after 2.6.12 have some TCP/IP bugs

Preliminary Local Speed Test:

Over Internet2 (or equivalent network), there could be a 10% to 80% drop in actual bit-rate between an institution and USC. The Institute requires a 100 mbps connection to Internet2 (or equivalent network) so that a 30 mbps actual bit-rate can be achieved, which would be considered a viable connection to the archive. The Institute has set up a test site to ascertain an institution's actual bit-rate to the archive. This test should be run from a computer which will have the equivalent network connectivity as the institution's designated video cache server. This will most likely be a Gigabit Ethernet connection to a local network.

Please copy and paste this link and hit the "start" button to run the test:

<http://vhi-portal.usc.edu/vhispeed/>

Budget

The annual subscription fee to access the Visual History Archive is \$15,000 USD per institution. This fee covers the costs the USC Shoah Foundation Institute incurs in offering this service, maintaining and updating the digital archive, and developing more robust search tools. Each institution needs to consider local costs that may include service and maintenance of the local cache (designated video server) and interfacing with faculty and students for content-related assistance.

Contact

For further information please contact Douglas Ballman, Manager of External Relations - Online Archival at the USC Shoah Foundation Institute either via e-mail at dougb@usc.edu or by phone, (213) 740-6046.