

What is Digital Asset Management?

Digital Asset Management (DAM), embodies a hardware, software and business process solution for managing the vast library of content with which WGBH is entrusted. More specifically, a DAM system is a centralized repository of digital assets, through which they can be imported, indexed, catalogued, searched, accessed, retrieved, viewed, reviewed, shared, exported, reused, distributed, stored, and archived. WGBH Vice President and Chief Technology Officer David Liroff likens a DAM system to the Dewey Decimal system that revolutionized the way people search and retrieve items in a public library.

What is an asset?

Digital assets consist of stills, graphics, text, video, and audio, and can be an entire program or elements thereof. Each asset is described in the DAM system using “metadata” to facilitate search and retrieval by specific search queries or in general data mining.

What is metadata?

“Metadata” is the information, or data, that accompanies a piece of digitized content. Examples of metadata include description, subject heading, file format, author/producer, rights holder, etc. When these fields of information use standardized vocabularies and have defined relationships, this constitutes a metadata model, and the content can be more easily indexed, catalogued, searched, and retrieved.

Why is WGBH involved in DAM?

Among the factors most critical to WGBH’s future viability is the ability to fully realize the value of the editorial content we create, acquire, package and distribute. To future-proof the content we hold in trust, WGBH has embarked upon the development of a major enterprise-wide DAM system.

How long has WGBH been involved in DAM?

WGBH has been involved in this effort since 1993.

Does WGBH have any partners in this venture?

Our recognized broadcast and education expertise has facilitated a close collaboration between WGBH and Sun Microsystems, with assistance from Artesia Technologies, a leader in enterprise Digital Asset Management, and Sony Electronics, Inc., a leader in broadcast and data media technologies. The end-to-end architecture also incorporates technology from Apple; Grass Valley products from Thomson Broadcast and Media Solutions; Harris Automation Solutions; Telestream; and Virage, a division of Autonomy Corporation.

What does WGBH hope to accomplish with its DAM initiative?

Because WGBH has one of the largest collections of audio and video content in public broadcasting, it has the most to gain from setting the Asset Management standards for the public broadcasting industry and related educational organizations and institutions.

This initiative enables WGBH and its technology partners to develop and test a reference architecture blueprint that provides the complete recipe for a proven scalable, open standards-based, end-to-end Digital Asset

Management system. More specifically, WGBH's DAM technology will handle broadcast-quality video, which will be the first of its kind.

Once implemented, DAM will allow us to centralize and share our content internally and with other Public TV stations and educational institutions, deliver our content on many more distribution channels, and also deliver it in more customized ways dependent on user-defined preferences.

Beyond WGBH, this system can be utilized by a variety of other organizations that have large collections of media assets, in order to digitally manage their content.

What is a "reference architecture?"

An innovative hardware and software solution that allows different components to work together to manage a complete digital library (video, audio, text, etc.). This term refers to the integration of a variety of independent systems that will enable the DAM repository to exist and function in all of the ways described above.

Is this just another technology initiative that won't go anywhere?

No. The digital age is the future of broadcasting. Digital content is a lasting medium that helps preserve our legacy of material and allow us to better utilize it in a number of significant ways. DAM is the answer to a multitude of issues that WGBH is forced to face as a content producer and broadcaster, as well as a business with an eye to the cost of operations and the financial bottom line.

Moreover, WGBH has been named a Sun iForce Solution Center for DAM, which will ensure that this project will continue and our internal implementation will occur.

What is a Sun iForce Solution Center?

From the Sun brochure: Sun iForce Solution Centers are places to build and test prototype solutions before going to market. iForce Solution Centers are designed to help Sun's customers and partners utilize the company's experience, strategic partner relationships, and proven methodology as the basis for developing and deploying best-of-breed solutions. iForce Solution Centers allow Sun customers to brainstorm and test technological options and see live proof-of-concept demonstrations. Sun and the iForce Partner Community work together to provide customers with hands-on, in-person help to design, develop, and deploy smart services on the Sun platform. Beyond simple demonstration centers, the iForce Solution Centers offer a means for customers to simulate true production environments, allowing customers to evaluate various solutions in no-risk situations.

What is the iForce Center at WGBH?

Located at 144 Western Avenue in Boston's Allston neighborhood, the Sun/WGBH iForce Center is called "The Center for Digital Asset Management at WGBH." This center is Sun's worldwide reference for Digital Asset Management. It is an executive briefing location where we can show the work we have done with our technology partners in creating a solution for DAM. The facility houses all the hardware and software that make up the DAM Reference Architecture, in order to demonstrate DAM in a working environment. Organizations who also have a lot of content to preserve and maintain come to the Center to explore the advantages of adapting this solution. These visitors include public broadcasting organizations and educational institutions, as well as businesses in the areas of content, production, commercial broadcasting, government, finance, etc. As a follow-up demonstration, visitors may have the opportunity to test and prove a DAM system that meets their specific needs. This facility should garner a lot of attention for WGBH, enabling our internal DAM project to continue.

What is the current status of our assets/content at WGBH?

Currently, WGBH has approximately 300 different databases housing content or information about our content, only some of which connect to one another. There is a great deal of redundancy in the data kept in these databases, and no system by which to share information between databases (and therefore departments) without a lot of manual steps.

WGBH has more than 50 years of assets stored on computer or physically stored in our Media Archives and Preservation Center. However, finding content for re-use is a very time and labor-intensive task in the current environment. In addition, many of our assets are archived in an old tape format that will easily deteriorate over time, or become unplayable on any current device.

How is using a DAM system better than prior WGBH systems?

A DAM system is improving our business processes in a number of ways. It eliminates the number of separate but redundant databases currently in existence around WGBH. In addition, in the production process, there are many instances of repetitive dubs being made or content being redigitized multiple times. The goal of this project is to have WGBH's content digitized and stored centrally, allowing for easier access across departments and the PBS system, a more efficient workflow and production process, preservation of our content in a digital format, integration of with existing editing and broadcast tools, multi-platform distribution of our content, along with a number of other business opportunities.

A real-world example of our current process: Following the disaster of September 11, 2001, WGBH's *Frontline* series produced a number of programs related to the tragedy and its major players. In doing so, the staff of *Frontline* requested 1,500 items from the WGBH archives over a two-month period, compared to just 30 items within the same time span the previous year. Estimated time spent by archivists to take these requests via e-mail or phone, retrieve material from WGBH's archives (located in several buildings both on- and off-site), record the loan out of the library, as well as clear the loan back into the library and re-shelve in the appropriate archive approximates 625 hours -- time the archivists can better spend cataloging and preserving materials.

How does this affect staffing?

One of the primary goals of a DAM system is increased workflow efficiencies that will enable WGBH as a content producer to spend more time in the creative process of making quality programs and less time on redundant tasks. In other words, it may take the same amount of people, but we are able to go to market faster and/or produce a superior product. The purpose is not to reduce resources as much as repurpose them in ways that more closely underscore WGBH's mission of providing high-quality educational programming, Web content, and other supplementary materials.