The University of Washington routes users to media resources with help from IBM.

Overview

- ***The Challenge***
  Make previously hard-to-access moving-image resources available to the academic community and the public via an online archive portal
- ***The Solution***
  IBM @server™ pSeries™ Linux ready Express Configurations and IBM Directory Server
- ***The Benefit***
  A scalable, reliable, open foundation to support the index today and as it grows

Creating a window to an underutilized resource

As pervasive as television, film and other moving-image media have become, they remain underutilized as mainstream information resources. They're rarely cited in research papers, for example, or consulted as primary reference sources. The University of Washington (UW) is involved with a project that aims to change that. The Moving Image Collections (MIC) Portal Project is building the nation's first online catalog of moving images, gathering information on clips from sources such as CNN, HBO and National Geographic, and integrating it into one reference resource accessible over the Internet.

UW, along with Rutgers University and the Georgia Institute of Technology, is designing and implementing the MIC portal for the project sponsors: the Association of Moving Image Archivists and the Library of Congress. When complete, the portal will be able to provide educators, researchers, exhibitors and the general public with a window into the world's vast moving-image collections.

Planning for growth and change

UW needed to develop and deploy a directory database designed to be scalable, reliable, flexible and consistent through changes. For its part, UW has been responsible for designing and implementing the archive directory database, which directs users to the moving images stored by content owners.

The team expects that eventually hundreds of thousands of contributors will be able to continually administer descriptions of footage to the index. And as a resource of the Library of Congress, the portal can be accessed globally. Because of the expected transaction load, UW needed a platform that could be extremely scalable while providing a stable environment.

As this research project promises to branch into many areas, an open environment was an important consideration. For instance, there is as yet no industrywide consensus on how video and audio collections should be described in metadata, so

> *"In the case of the Library of Congress, UW, Rutgers and Georgia Tech, we had all run pSeries hardware using AIX for a number of years. We have all been quite satisfied with the reliability of the hardware, the scalability of the architecture and the support we get from IBM."*
>
> *—Jim DeRoest, Assistant Director of Computing and Communication, University of Washington*

the project team is working to define an application profile that will become a larger standard. Also, the system will be evaluated by and introduced to the academic community for use in K-12 classrooms. The portal needed to have the flexibility to evolve over time to support enhancements. Since Linux is an open source operating system that can help make access to the underlying code easy, it was viewed as an essential environment in which to conduct this development.

The project requires a highly flexible but standardized metadata architecture to organize these diverse, valuable resources. And with expected custom coding, the ability to avoid changing device drivers throughout the project became a major consideration. "Having some consistency in the overall architecture of the hardware is important," says Jim DeRoest, Assistant Director of Computing and Communication at the University of Washington. The need for a consistent environment enabled by open systems, part of the IBM vision for e-business on demand™, made IBM **@server** pSeries servers running Linux the ideal choice.

Agreeing on a solution

IBM was chosen because of UW's long history with IBM AIX® and its confidence in IBM's hardware configurations. "There was a team discussion about the hardware platform, and there was discussion with the Library of Congress since they'll have to support and manage the portal," says DeRoest. "We really did zero in on a hardware platform that we were all comfortable with. It was an easy consensus to go with pSeries because of the collective background that we had with it."

UW selected two pSeries p610 models running SuSE SLES 8 Linux and is leveraging the Lightweight Directory Access Protocol (LDAP) for the directory database server. The directory database server does not hold the actual moving-image content but instead is a meta-information database that stores data about the media files, and permits users to search and locate references to the actual image files, which are stored by various content providers.

Gaining momentum with a solid solution

As the project gains momentum, UW believes the pSeries will continue to deliver the scalability, performance, value and stability that the project requires. And that Linux on pSeries will bring MIC the best combination of cost, openness, portability and access to source code. Moreover, UW's involvement in making moving-image collections widely available has helped deliver on the university's primary mission: the preservation, advancement and dissemination of knowledge.

For more information

To learn more about this solution, please visit:

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