Preliminary Digital Preservation Interoperability Framework (DPIF) Results

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Abstract

In October 2009, the International Organization for Standardization (ISO)/ International Electrotechnical Commission (IEC) Joint Technical Committee 1 (JTC 1) reconstituted the Study Group (SG) on Digital Content Management and Protection (SGDCMP) with more focused terms of reference. Specifically, the attention of the SG was targeted on the important issue of long term "digital preservation". This term is understood to include the protection and management of both digital data and digital content, including associated metadata. One of the SGDCMP 2010 tasks was to organize workshops and symposiums that would help to develop a roadmap on long-term digital preservation standardization by identifying requirements, technologies, and best practices. Through the US International Committee for Information Technology Standards/Digital Content Management and Protection (INCITS/DCMP) and ISO/IEC SGDCMP, Wo Chang from the National Institute of Standards and Technology (NIST) was appointed as the program chair for both workshop and symposium events.

This was a two-part series on roadmap development for Digital Preservation. The US Workshop (co-hosted with NIST and INCITS, March 29-31 at NIST, US) was the first event focusing on US national needs and best practices, while the international symposium (co-hosted with NIST and ISO/IEC SGDCMP, April 21 – 23 in Dresden, Germany) gathered different requirements and best practices at the international level. Both roadmaps would then be combined as input to the ISO/IEC SGDCMP to standardize digital preservation interoperability framework for effective and reliable access to preserved digital contents between interoperable digital preservation repositories.

This paper presents some of the preliminary results from the above two events. It is comprised of seven vision speeches from keynote speakers, followed by 50 presentations categorized into three tracks:

- *Content organizations (government, public/private institutes, etc.) for handling the preservation operations, strategies, and requirements*
- *Technology developers (academia, commercial companies, R&D labs, etc.) for providing preservation approaches and solutions*
- *Standards bodies (ISO/IEC, consortiums, industry associations, government initiatives, etc.) for establishing preservation best practices and standards*

Biography

Wo Chang is currently serving as the manager of the Digital Media Group at National Institute of Standards and Technology (NIST). In these duties Mr. Chang oversees several key projects including digital data archival and preservation, motion image quality, and multimedia standards. In the past, Mr. Chang was the Deputy Chair for the US National Body for MPEG (INCITS L3.1) and chaired several key projects for ISO/IEC SC 29 WG11 (MPEG), including Content-based Search Framework, Multimedia Application Formats, MPEG-7 Profiles and Levels, and co-chaired the ISO/IEC SC 29 WG1 (JPEG) JPEG Search project. Mr. Chang was one of the original members of the W3C's SMIL (Synchronization Multimedia Integration Language) Working Group and developed one of the SMIL reference software. Furthermore, Mr. Chang also participated with the Internet Engineering Task Force for the protocols development of Session Initiation Protocol, Real-time Transport Protocol, Real-Time Streaming Protocol, and Resource-Reservation Protocol. Mr. Chang's research interests include digital data preservation, content metadata description, digital file formats, multimedia synchronization, and Internet protocols.