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Rodrigo Arias, Master's Degree in Computer Science and Artificial Intelligence (1992), US Fulbright Scholar (1990-1992) and Computer Engineer (Universidad del Valle de Guatemala, 1986), has served as director in the Computer Science Department (UVG) from 1988 to 1990, and as Computer Science Professor (UFM, UVG, USAC) from 1985 to 1994. He was the co-owner of nortropic.com (provides internet/intranets system development and consulting services to companies in the United States and Latin America) from 1995 to 2000 as well as co-founder and General Manager of assist, Ltd. (provides custom made software development and consulting services in Latin America, United States and Europe) from 1986 and 1995. He is the co-founder and CEO of nTropic, inc. (develops software for digital and physical libraries, Enterprise Content Management (ECM), and rich-media content production and delivery). Rodrigo has published various publications, e.g. "eLearning Libraries: Managing rich media content in an academic institution" and "Fast, cheap, and in control: managing metadata for streaming media".



Matthias Reichenbach, Lead XML Developer, nTropic Inc.

Grete Pasch has 25 years designing and implementing systems and teaching about the creation and use of information resources experience. She has a PhD in information studies and an MLIS from the University of Texas at Austin, an MSc in systems analysis from the London School of Economics, and a computer engineering degree from the Universidad Francisco Marroquín (Guatemala), where she has served as Director of Academic Information Resources since 2001. Her main area of interest is the merging of physical and digital resources, including the creation and management of digital libraries and rich-media content.



XML Saves the Day: Porting a Rich-Media Collection to a Mobile Platform in Three Weeks Flat

Since 2001, we develop specifications and tools for creating and deploying rich-media content. Our GLIFOS Markup Language (GML) is an XML-based specification that separates the content (videos, transcriptions, slides) from the rendering of the rich-media player. Using our tools, the University Francisco Marroquín (UFM, Guatemala) has created and hosts an online library of over 300 hours of enriched streaming video (www.newmedia.ufm.edu) to support web-based and classroom teaching.

GML is technology, platform, and format independent. We claim that these qualities guarantee content portability to diverse platforms in use today, as well as to those that will arise in the future. We had backed this claim by proving how simple it is to port GML to the leading platforms (e.g. Real Player and Windows Media Player), however, we had yet to port it to a truly new platform that is, one that arose after the design of our XML specification and our content creation tools.

This paper describes our XML specification and content creation tools, and gives a week by week description of our experience porting the UFM's collection to the new PDA models. Such mobile devices are able to stream video through their Wi-Fi connection, without clogging their CPUs or draining their batteries. Finally, we discuss how this experience has validated the importance of XML for digital preservation and our tools' ability (so far) for porting content to new platforms.

