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Title

Consumer Digital Home Storage

Abstract

A decade ago most homes in the United States had perhaps one hard disk drive in a single family PC. Today, most homes have multiple PCs, personal video recorders and players, MP3 players and external storage devices all of which have hard disk drives in them. These drives are filled with music, photos, videos and other personal information.

Although storage capacity has increased to keep pace with the demands of the consumer, the filing systems used to organize this data have remained largely unchanged since the birth of the computer. It is nearly impossible to find a particular photo or video clip out of the potentially thousands that may be stored on these devices unless the consumer has spent a significant amount of time cataloging and tagging their photo, video and music collections with searchable meta data that describes the content of the object.

The situation is further complicated since many of the solutions which allow consumers to tag their content do not associate the meta data with the file itself and store it in a separate database. This problem naturally lends itself to the adoption of object-based storage systems for personal storage. In this talk we will discuss some of the issues in deploying an object-based storage architecture in the home and some methodologies that we are using to design storage solutions for the home consumer.

Biography

Tim Rausch received his B.Sc, B. Ed and M.Sc in Physics from the University of Windsor in Windsor, Canada. In 2003 Tim received his Ph.D in Electrical and Computer Engineering from Carnegie Mellon University in Pittsburgh, Pennsylvania. Upon graduation Tim joined the research staff at Seagate Research and is currently working on Seagate's Terabyte Home project where he is exploring new storage architectures and technology that address consumer needs in the 4-10 year time frame.