These are two relatively unrelated topics. The first has to do with the preservation of content that requires software context for interpretation. The OLIVE project led by Mahadev Satyanarayanan at CMU is a perfect example of the challenge of preserving meaning of digital objects over very long periods of time. That such a capacity is needed is surely unarguable. We already have examples of the loss of digital content, not because the bits are unreadable but because they are uninterpretable. The Internet, itself, continues to evolve and is already going off the planet, albeit on the back of a new set of protocols designed to deal with the delay and disruption encountered in deep space environments. Connectivity is not continuous and delays brought about by the inadequate speed of light are inescapable. We will discuss the current state and future aspirations of this work.

About the Speaker: Vinton G. Cerf is vice president and Chief Internet Evangelist for Google. He is responsible for identifying new enabling technologies and applications on the Internet and other platforms for the company. Widely known as a “Father of the Internet,” Vint is co-designer, with Robert Kahn, of TCP/IP protocols and basic architecture of the Internet. In 1997, President Clinton recognized their work with the U.S. National Medal of Technology. In 2005, Vint and Bob received the highest civilian honor bestowed in the U.S., the Presidential Medal of Freedom. During his tenure with the U.S. Department of Defense’s Advanced Research Projects Agency (DARPA) from 1976-82, Vint played a key role leading the development of Internet and Internet-related data packet and security technologies. He served as founding president of the Internet Society (ISOC) from 1992-95 and was on the ISOC board until 2000. Vint is a Fellow of the IEEE, ACM, AAAS, the American Academy of Arts and Sciences, the International Engineering Consortium, the Computer History Museum and the National Academy of Engineering.