Data Capacitor Wide Area Network

Abstract for Data Capacitor Wide Area Network (DC-WAN) presentation at 2011 SMM

Since 2008, Indiana University's Data Capacitor Wide Area Network (DC-WAN) has served a Lustre parallel filesystem to thousands of clients across the nation. On the TeraGrid, DC-WAN provides a production wide area filesystem, which has been mounted at 8 of 11 partner sites.

In this talk, Robert Henschel will outline how DC-WAN is used today, and how performance problems on the filesystem and networking level can be diagnosed. In addition, an integrated approach to performance measurement, from the application through the networking layer to the disk storage will be introduced. This approach was tested first using the German 100Gb testbed deployed between Dresden and Freiberg early in 2011.