

## **Theory and Practice:**

### **Management and Protection of Digital Resources**

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#### ■ **Abstract**

Digital resources are omnipresent and have greatly impacted our work and life in the emerging information society. It's of crucial importance for research institutes to build and manage digital resources, and share them with the society. As one of the pioneers in China to use computer and internet technologies, the Chinese Academy of Sciences is one of the leading organizations in building, managing and using digital resources for scientific research and public outreach. Two examples are the twin projects "Scientific Database and its Information System" and "Virtual Science Museums of China" (VSM); the former one initiated in 1982 was geared for research use and has set up a complete system with comprehensive resources and specifications, while the latter one initiated in 1999 was tailored for education and public outreach. China Digital Science and Technology Museum (CDSTM) started from 2005 is a national effort sponsored by the Ministry of Science and Technology. VSM was one of the active contributors and coordinators from the very beginning, sharing its experience in collecting, processing and managing digital resources for science education and public outreach. CDSTM has set up a system with 16 specifications for data collection, processing, conservation, management and service, and are now broadly used in national corner of internet-based science education and public outreach (also translated as science popularization). As one of the principal investigators, the author discusses relevant key issues and solutions in this article, and describes possible future scenarios.