

Storage Management Resources on the Internet

BY STEVE PRYOR

As the capacity of storage systems grows larger, the systems become more complex to install, maintain and understand. At the same time, the corporate drive for efficiency demands that fewer people be devoted to the task of managing storage. Those few who do so must therefore have access to the largest possible amount of up-to-date information about the systems they are managing. Because storage hardware and software change so rapidly, the old methods of keeping up-to-date often will not do. No longer can the storage administrator rely on the stacks of old hardcopy manuals that he has "rescued" from the trash bin. Instead, most manuals are now delivered on CD-ROM, allowing access to a much larger volume of information, and making information easier to find via "search" commands.

Storage managers are constantly looking for information. Besides knowing the day-to-day techniques needed to ensure that sufficient disk space is available and that backups and restores run properly, storage managers are often called upon to give advice on corporate data processing strategy — answering questions such as what sort of devices are fast enough or have enough capacity, or are reliable enough to meet the company's needs. The Internet provides a new vehicle for storage administrators looking for information to help them answer these questions.

THE INTERNET: A NEW VEHICLE FOR STORAGE ADMINISTRATORS

One way to find information on the Internet, of course, is to use one of the many search engines such as AltaVista, Yahoo, or DejaNews to locate items containing a given keyword. Often, however, it is faster and more practical to maintain a list of "favorite" sites that are known to have reliable or in-depth

For the storage administrator, the challenge is to sift through this mass of data to find those sites and services that are useful and reliable, and add that information to the knowledge that he or she uses to keep the storage systems running efficiently.

information. This month, I examine several sites that are of interest to storage administrators and others involved in maintaining large-scale IBM systems.

There are literally millions of places on the Internet to go for information. For most users, the place to start is the World Wide Web, and for storage administrators, one of the best places to start on the Web is the IBM Storage Systems Division home page, www.storage.ibm.com. This page provides an overview of all of IBM's storage systems and is a good place to find general descriptions of new storage hardware such as Virtual Tape Server or the Versatile Storage Server, a new open-systems RAID device. White papers and details of storage software can also be found by following various links from this page — for those new to DFSMS, one of the most useful is probably the SMS home page www.storage.ibm.com/storage/software/sms/smsgen.htm.

Up-to-date manuals are invaluable to the storage administrator. The OS/390 Internet Library, www.s390.ibm.com/os390/bkserv, provides access to the most current set of IBM manuals, including those for OS/390 release 2.4 and 2.5. Beginning with OS/390

release 2.4, many of the manuals that were previously only available as licensed manuals, such as the various Diagnosis Guides and Data Areas manuals, have been unclassified and are available through this site.

Still another IBM site that is of interest to storage administrators is the IBMLink site, www.ibmlink.ibm.com. In addition to providing browser-based access to the IBMLink system, links are available to items such as the current IBM product announcements, press releases, and hardware and software specifications. One important link for those who want to keep abreast of current developments is iSource, the IBM list server. When subscribing to the list server, you can establish a profile that describes your areas of interest (storage, networking, OS/2, etc.) so that the email you receive from the list server is somewhat customized.

The International Storage Systems Symposium technical conference sponsored by IBM and held every August in the San Francisco area is probably one of the most useful conferences for storage administrators. Details on this conference can be found at www.training.ibm.com/ibmedu/conf/stor.

The IBM-MAIN newsgroup is probably the most active of the mainframe-oriented newsgroups, and storage-related topics are often discussed here. If a topic is not currently the subject of discussion it may have been discussed in the past, and a look at the newsgroup archives may be helpful. These are maintained at the University of Alabama Gopher server, gopher://ualvm.ua.edu/11. Selecting "Local UAVM1 Listserv Archives" will display a menu that includes the archives for the IBM-MAIN list.

Readers of *Technical Support* magazine will of course be familiar with the NaSPA web site, www.naspa.net. In addition to the public domain software, (including the

well-known CBT Tape) available to NaSPA members, all of the articles from the 1996 and 1997 issues of *Technical Support* are indexed and available for download in Adobe PDF format.

Following the “hot links” from NaSPA will bring you to one of the most comprehensive of mainframe-oriented web sites, Eric Loriaux’s System/390 Home Page, www.loriaux.com/s390. This site has lots of information and literally hundreds of links to software companies, individuals, books, and jobs. You can also subscribe to the site newsletter, which provides a monthly description of updates to the site.

Other sites also provide newsletters that contain useful information for the storage administrator. Some of these include the well-known *WSC Times* from Washington Systems Consulting, at www.wscinc.com, and the Xephon newsletters at www.xephon.com. The Xephon site also allows downloading of the code accompanying past years’ articles at www.xephon.com/archives.html.

There are other “unofficial” sites that may be of interest to storage administrators, including Dave Alcock’s MVS Freeware page, www.ticnet.com/davea/mvs, Bal Oberoi’s Mainframe programming page,

www.geocities.com/~oberoi/mainfrme.html, and Rock Painter’s www.texasrock.com. Gilbert St. Flour’s collection of MVS utilities and links at members.home.net/gsf may also be useful.

Software and information is also available at more “official” sites, of course, such as booksrv.raleigh.ibm.com/ISPF/tasid.htm. TASID, an MVS system monitor that can provide information on a number of different indications of system status, including device status and available devices and units, is available from this site. ISRDDN, a TSO command included in ISPF version 4.2, is a subset of TASID.

Nearly all new disk storage devices built nowadays incorporate RAID principles. The RAID Advisory Board (www.raid-advisory.com) is a group of about 40 hardware and software vendors that have banded together to provide standards and documentation for RAID devices. More detailed information about the various vendors’ hardware offerings are available at the vendor web sites, of course. Links to many of these vendors who exhibit at the SHARE Technology Exchange can be found at the SHARE web site, www.share.org.

The sheer number of web sites, news-groups, and LISTSERVs available on the Internet make it impossible to provide a comprehensive list of all of the locations that might be of interest to storage administrators. Virtually all vendors of software or hardware, as well as many individuals, have taken advantage of the inexpensive global reach of the Internet to make information available to users. For the storage administrator, the challenge is to sift through this mass of data to find those sites and services that are useful and reliable, and add that information to the knowledge that he or she uses to keep the storage systems running efficiently. 

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