SIGMOD Goes On Line: New Member Services Via Internet

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Abstract

ACM SIGMOD is pleased to announce a new set of on line services for members, including on line copies of portions of the SIGMOD *Record* (including all funding columns since 1991, and wider coverage of the *Record* beginning with this issue), an archive of recent conference announcements, and a database of funding information. These services are fully functional and ready for use today. The remainder of this message explains how to access the services, and why you should access them in the manner suggested.

SIGMOD's provision of on-line services will allow SIGMOD members easy access to portions of the *Record* before publication. This is particularly important for timely access to information about funding for database research, since requests for proposals are often issued relatively shortly before proposals are due, so that funding announcements in the *Record* often contain announcements whose due dates are past. Now readers have access to the latest issue of the funding column as soon as it is written (for example, July in the case of the issue printed in September). In addition, since many funding programs repeat year after year, readers have easy access to an archive of past columns which they can use in planning future proposals. Furthermore, SIGMOD members can now directly access an archive of current and past funding announcements issued by agencies. These announcements will be posted as soon as they are received by the funding column editor; thus they are available immediately to SIGMOD members, who need not wait until the funding column is penned for the next issue of the *Record*. The archive also contains a set of news stories that are relevant to database funding, and a collection of general information (that will grow over time) that may be helpful to individuals seeking funding.

The new SIGMOD archive also contains a collection of calls for papers and/or attendance at conferences and workshops. Thus a member can easily scan the collection to see where to submit a newly written paper, or what relevant workshops to attend.

1 How to Access SIGMOD On Line Services

Gentle reader, you are probably expecting me to say that SIGMOD's on line information is available via anonymous ftp. And, in fact, the services *are* available via anonymous ftp; but anonymous ftp is 1970s technology, and this is your chance to use 1990s technology to access information on line.

But, you say, *I'm comfortable and happy using anonymous ftp. Why should I take the time to learn to use a new tool instead of making do with what has always served me in the past?* Gentle reader, you are in large if not good company: database researchers are woefully ignorant regarding modern information retrieval (IR) technology. In the past, database researchers could get away with not knowing about IR techniques; but in the future, ignorance will no longer be bliss, as explained below.

The amount of information stored on line has undergone explosive growth over the past few decades. This increase has been largely in structured information that can be managed nicely by a database management system. The biggest boom today, however, is in unstructured on line information, such as documents, images, and sounds. This information is available freely over the internet, to those who know how to find and view it. I predict that in the next few years the amount of unstructured information on line will grow much faster than the amount of structured information. This mushrooming opens up research possibilities in information retrieval, of course, but also in the database world. Although IR techniques are needed to effectively search through unstructured information, traditional database style facilities are needed as well and are not currently available from popular information servers. For example, a researcher might wish to find images of the ocean floor that were taken during a certain period of time. Traditional IR techniques don't allow one to express that sort of query easily, but database query languages can handle them easily. For more information on potential research activities, I refer you to the ARPA TRP digital libraries program, whose announcement can be found in the SIGMOD on line database of funding information.

Another potential consideration, gentle user, is that the means of access recommended below is much easier to use than anonymous ftp.

So, if you want to be forward looking and find out what 1990s information retrieval technology has to offer you, and perhaps find out what databases have to offer 1990s

information retrieval technology, then follow the instructions below to get a state of the art internet browser. By all means, use the browser to look at the SIGMOD on line services, but then go out and see what else is available on the internet. You only need to press a single button (under 'Documents') to try any of the following:

If you're feeling practical, take a look at the on line hypertext manuals for Unix; if you're feeling lazy, check out internet talk radio. Feeling argumentative? Take a look at the recent decisions of the US Supreme Court, available from Cornell Law School's Web server. Childlike? Explore the dinosaur exhibit at the Honolulu Community College Web server. Overheated? Take a look at your local weather map from the National Weather Service. Artistic? Try the Library of Congress Vatican Exhibit. And as you listen to music, examine images, view dvi and postscript files, watch movies, view ordinary text files and follow hypertext links, think about what role database technology might play in this new world of on line information.

2 Detailed Instructions For Access

1. If you aren't an ACM SIGMOD member, join up. Annual dues are only US$12 for students and US$20 for others, if you belong to ACM. If you don't belong to ACM, you can join SIGMOD for US$27. Details are on the inside back cover of the SIGMOD *Record*, or write to acmhelp@acmvm.bitnet.

2. If you want to use anonymous ftp, then connect to bunny.cs.uiuc.edu, log in as anonymous, and give your email address as password. You will be in the root directory for conference announcements and funding information. Or do anonymous ftp to segev.lbl.gov for the archive of the SIGMOD *Record*. Happy rooting.

3. If you don't want to use anonymous ftp, and you have access to a workstation running X or OpenWindows, then get a free copy of NCSA Mosaic installed on the workstation (have your sysadmin do it following the instructions below). (NCSA is the National Center for Supercomputing Applications at the University of Illinois.)

Mosaic will let you browse information on WAIS, Gopher, and Web servers, as well as ftp sites. You can look at hypertext (html) files, postscript, and dvi files (assuming you have ghostview and xdvi installed), and look at images and listen to sounds as well (assuming your sysadmin has made the necessary incantations over Unix). Mosaic figures out the format of the document and automatically invokes the proper viewer, assuming that you have a copy of the viewer on your machine. You can also add private voice or text annotations to items that you examine. Mosaic remembers which items you've viewed before (so it will be easy to pick out the new funding announcements, for example), and will keep track of your annotations.

Once you have Mosaic installed, enter the command "xmosaic" (or "xmosaic -mono" if you have a monochrome display). If the display variables used by X and OpenWindows applications aren't set up correctly, you will get an error like "Error: Can't Open display". If this happens, contact your local sysadmin for help in setting up the display variables.

In most cases, executing xmosaic should give you a new window. The majority of the window is a large text viewing area, probably headed with the title "NCSA Mosaic Home Page". At the very top right of the window, you should see the word "Help" with the letter 'H' underlined. If you press the leftmost mouse button while the pointer is over this word, you will get a choice of various types of help, describing how to use Mosaic.

When you are ready to view the SIGMOD *Record* database of funding information and conference announcments, press the leftmost mouse button on the word "File" in the upper left corner, and select "Open" from the choices provided. You will get a popup window saying "URL To Open:" Type in

http://bunny.cs.uiuc.edu/README.html

and click on "Open", and you should see a page of text titled "SIGMOD Record archive and database of conferences and funding information". Then you can access all the currently available information by clicking hypertext buttons. But first, so that you don't have to remember exactly how to find the database in the future, select "Hotlist" from the "Navigate" menu along the top of the window, and click on the "Add Document to Hotlist" button.

If you try to connect to a site that is not available (e.g., it is down or disconnected from the network), Mosaic will eventually time out. The time out period is very long, so be patient (go read your mail for a while) and don't push additional buttons in the meanwhile.

3 Detailed Instructions for Mosaic Installation

This section describes the preliminary setup procedure for NCSA Mosaic for X Windows and OpenWindows. Precompiled Mosaic binaries are available for workstations that are in the IBM RS6000 series, the Sun Sparcstation series, the DEC 3100, 5000, and Alpha, and SGI. For those who wish to compile a binary for their own system, source is available. Mosaic for the Macintosh is currently in alpha test, and Mosaic for PCs is under development.

Mosaic requires a network connection to work properly. If your machine is not connected to the Internet, you will not be able to complete these instructions, nor will you be able to fully utilize Mosaic.

To obtain Mosaic binaries, connect to the NCSA anonymous ftp server by executing the command:

ftp ftp.ncsa.uiuc.edu

You will be prompted for a name; enter the name "anonymous". You will then be prompted for a password. You should enter your e-mail address in the form name@address.

You will then get a welcome message, followed by a prompt: "ftp>". At this prompt enter the command:

```
cd /Mosaic/xmosaic-binaries
```

You will receive an informative message about the contents of this directory. Enter the command:

```
ls
```

Determine which file displayed is the right binary for your platform. xmosaic-dec.Z is for DEC 3100 and 5000. xmosaic-sun.Z is for Sun Sparcstations. xmosaic-sgi.Z is for SGI workstations. xmosaic-alpha.Z is for the DEC Alpha machines. xmosaic-ibm.Z is for the IBM RS6000 machines.

Enter the "binary" command at the prompt, and then enter a "get" command with the name of the file you want to retrieve. Example for a Sparc binary:

```
ftp> binary
200 Type set to I.
ftp> get xmosaic-sun.Z
```

This will transfer the compressed binary file to your machine. The transfer may take some time. When you get the "ftp>" prompt again, disconnect by entering the "quit" command.

Now you should have a file in your local directory with the same name as the one you requested with the "get" command. In the example above, that file would be called "xmosaic-sun.Z". The .Z at the end means this is a compressed file. To uncompress it, enter the command "uncompress xmosaic-sun.Z". If you get an error message saying the command uncompress could not be found, contact your local system administrator. After uncompress executes, you will have a file without the .Z suffix in its name, such as "xmosaic-sun" in our running example.

You will now rename this binary file, change its modes to be executable, and place it in an appropriate directory. Example commands to do this:

```
mv xmosaic-sun xmosaic
chmod 755 xmosaic
cp xmosaic /usr/local/bin
```

You can place xmosaic in /usr/local/bin or in any other directory you wish. Note that it must be a directory that is in your command search path.

As your final step, if you are running csh, you will need to execute the command "rehash", so the shell knows to look for new binaries. If you aren't in csh, or don't know, you can execute "rehash" anyway, and will just get a "not found" message.