10 BEYOND THE BASIC SEARCH

We have seen that databases come from many different sources, and are intended for many different audiences. They vary not only by their subject content but by the way the data are presented, the level of detail provided, and the currency of the information. Four basic types of data are in databases found on the DIALOG system:

- Bibliographic
- Numeric
- Directory/dictionary
- Full text

Bibliographic databases are the most common type of file on the older online systems, and their records, as we saw earlier, take the form of bibliographic citations (title, author, source, etc.), sometimes accompanied by an abstract. Numeric databases contain records that are mainly tables of statistical data but often include some textual comment. Directory/dictionary files give factual information about companies, organizations, products, and the like, often in tabular form. Full-text databases contain records that may be several pages long and contain the complete text of magazine articles, newswire stories, encyclopedia entries, and so forth.

> *More and more full-text material is becoming available, especially on the Internet. Many of the major vendors are also offering the option of full-text, either directly or as a link from the citation. It seems likely that this is the wave of the future. – GW*

Bibliographic databases direct users to a source of information that must be accessed elsewhere, while numeric, directory, and full-text databases provide the information itself.

With hundreds of databases to choose from, selection of the most appropriate files is not always easy. This chapter explains where to find help in making this choice and some of the techniques necessary when searching multiple databases.

Choosing Which System to Search

When a searcher has access to a range of different search systems, the decision about which to use in any given situation will normally depend on what is available on each system. If the same file is available from more than one vendor, the deciding factor is likely to be cost. The price per hour of connect time and the cost per record are what contribute to total search costs, and both may vary, even for the same file, on different systems. In certain cases it is thus possible to save money by preferring one system to another, and Internet of course is "free."

Many search topics require the use of multiple files to obtain comprehensive results, and it is common for searches nowadays to be performed on at least two or three databases. When more than one file needs to be searched, the availability of the full range of files on one system will possibly influence the choice of search system because it will often save time and money to be able to complete the search on a single system.

In some small proportion of searches, the availability of a particular search feature may also be a deciding factor in the choice of system because the same file may be mounted differently, and thus offers different search features on different systems. It pays to check all the available documentation with great care.

A number of sources provide information on the range of databases available across all the search services. For example, the *Gale Directory of Databases* provides excellent overviews of current services and a wealth of information on databases of all types.[1]

Choosing Databases

Many of the criteria used in selecting printed reference resources are also relevant when choosing online files. The following are some points to note when considering the choice of files for searching:

- Subject scope (and how subjects are covered in the file)
- Access points (searchable fields)
- Type of material (popular, research, etc.)
- Type of data (bibliographic, numeric, etc.)
- Time period covered
- File currency (how up-to-date it is)

In addition to these general reference considerations, each of the online retrieval systems offers an extensive range of helpful directories, guides, and newsletters to help choose among their own databases. For example, the DIALOG Database Catalog provides:

- a description of each database (in alphabetical order) detailing subject content, dates of coverage, publisher, etc.;
- charts indicating the type of data, special features, services, and the update frequency of each database;
- a list of database suppliers and the databases they produce; and
- a listing of DIALINDEX/OneSearch Subject Categories which group files by subject.

Database bluesheets summarize the content and list the specific search features that are available on each individual file; they are now available on the Internet from DIALOG's website (www.dialog.com). Each bluesheet includes a sample record (to show what a typical record in the database looks like) and lists the record formats in which output can be displayed. More detailed information for each individual file covering each field of the record, including details of how to search it, is available online.

Despite this variety of search aids intended to assist with the choice of appropriate databases, personal experience suggests that choosing the "best" file to use is not an easy task for the beginning searcher. It may be important to consider factors such as intended audience, type of indexing used, or fields available for searching on particular files. The type of source document required (e.g., patents or research reports) may help narrow the choice of database. There is sometimes considerable overlap between databases, though the amount tends to vary by subject and by file. If a comprehensive search is required, it may be necessary to ignore the likelihood of overlap and accept that some records will necessarily be duplicated. They can be easily eliminated from the final output by using the REMOVE DUPLICATES or RD command.

As has been mentioned, the vendors sometimes group files by their type and coverage in some of their system documentation, and this is another useful resource to assist in database selection. But be aware that the suggested groupings should not necessarily be accepted without question because they often include files that will prove inappropriate.

DIALINDEX

In order to help searchers with the task of choosing appropriate databases, each of the major vendors provides an index file, a kind of "database of databases," which is accessible online. It is a composite of all the inverted files, both Basic Indexes and Additional Indexes, of the whole range of databases available on the system. On the DIALOG system this file is called DIALINDEX (File 411), and it allows the searcher to browse selected search terms in files that look potentially useful so as to compare postings figures. In this way DIALINDEX helps users check which databases have higher postings on a specific topic before the actual search is conducted in more expensive databases. It is particularly useful when there are a whole group of possible files for a given query, and there is uncertainty as to which of them will prove the most useful. DIALINDEX allows the searcher to select anywhere from two to the total of potential files to browse, though of course a small selection would normally be appropriate for consideration in a given search.

It is important to remember that this is an index file. It contains no records and no sets are formed when it is searched, so certain commands (e.g., TYPE, DISPLAY, PRINT, or EXPAND) cannot be used. In order to use this browse facility, we need a new command (usable only in DIALINDEX) to enable us to select the group of files we think may be useful for our search. After we have selected the DIALINDEX database the first command is always going to be SET FILES or SELECT FILES (abbreviated SF) followed by a listing of files, in order to limit the search to that particular group. Be careful not to omit this SET FILES command, or an error message will appear!

The SET FILES command can be used with:

- *file numbers*
  e.g., `select files 38,56,191`
- *acronyms for database categories* to select subject groups (see the Database Catalog for details of the available categories)
  e.g., `sf compsci, software`

- *a combination of numbers and acronyms* to add files to a subject category
  e.g., `sf humanit,47,111`
- *the Boolean NOT operator* to exclude file numbers from a subject category.
  e.g., `sf chemlit not 34,87,94`

A space must be entered after the SF command, and file numbers and acronyms must be separated with commas. Hyphens can be used to indicate a range of file numbers. Following the selection of files, the system confirms the databases chosen, and a list of their file banners can be obtained by using the command SHOW FILES.

When the system issues the next prompt, a single SELECT statement, containing up to 240 characters, is entered in the usual DIALOG format. It is probably most useful to limit this SELECT to the most important concepts of the search linked by appropriate logic. Terms can be linked using Boolean or proximity operators and can be nested using parentheses. Prefix and suffix codes are also acceptable on DIALINDEX, but it is important to check their availability on all of the files selected. (Certain prefix codes may need to be ORed together in order to make sure that a particular feature is covered in all the selected files.) The system responds to the SELECT command by displaying the number of items retrieved from each database for the final logical statement.

DIALINDEX is begun as would be any other file; its file number is 411:

```
?b 411

File 411:DIALINDEX(tm)

DIALINDEX(tm)
(Copr. DIALOG Info.Ser.Inc.)

*** DIALINDEX search results display in an abbreviated ***
*** format unless you enter the SET DETAIL ON command. ***
?select files 10,51,79,155
  You have 4 files in your file list.
  (To see banners, use SHOW FILES command)
?show files

          File     Name
          ----     -----------
           10:     AGRICOLA_70-1998/Jan
           51:     Food Sci.&Tech.Abs_1969-1998/Feb
           79:     Foods Adlibra(TM)_1974-1998/Nov
          155:     MEDLINE(R)_1966-1998/Mar W4

?s low()cholesterol()diet?

Your SELECT statement is:
  s low()cholesterol()diet?

         Items     File
         -----     -----------
           283      10: AGRICOLA_70-1998/Jan
            13      51: Food Sci.&Tech.Abs_1969-1998/Feb
            26      79: Foods Adlibra(TM)_1974-1998/Nov
           269     155: MEDLINE(R)_1966-1998/Mar W4

All files have one or more items; file list includes 4 files.
```

What we are interested in here are the postings figures for each file, in order to determine which databases we will use for our actual search. We can see in this case MEDLINE and AGRICOLA are going to be far and away the most useful files to use for information on low-cholesterol diets. The actual search in those files may be elaborated, but at least we know the most useful files to search.

Here is an example of the use of DIALINDEX with one of the Subject Category acronyms.

```
?set files people
You have 17 files in your file list.
  (To see banners, use SHOW FILES command)
?s bella()abzug

Your SELECT statement is:
s bella()abzug

          Items    File
          -----    -----
            187     47: Magazine Database(TM)_1959-1998/Feb 09
            137     88: IAC BUSINESS A.R.T.S._1976-1998/Feb 10
             36    111: Natl.Newspaper Index(SM)_1979-1998/Feb 10
             70    141: Readers Guide_1983-1997/Dec
             74    148: IAC Trade & Industry Database_1976-1998/Feb 10
              4    211: IAC Newsearch(TM)_1997-1998/Feb 10
             14    234: Marquis Who's Who(R)_ 1997/July.
              1    236: Bowker(r) Biographical Directory_1997/Oct
              1    466: Info Latino America_1988-1995/Dec W1
            130    484: Periodical Abstracts Plustext_1986-1998/Jan W3
             18    603: Newspaper Abstracts_1984-1988
              2    648: TV AND RADIO TRANSCRIPTS_1997-1998/Feb W2
             51    799: Textline Curr.Glob.News_1995-1997/Oct 12
    13 files have one or more items; file list includes 17 files.
```

The most helpful files for this search appear to be Magazine Database, IAC BUSINESS A.R.T.S., and Periodical Abstracts.

The next example illustrates the use of the Boolean NOT to eliminate unsuitable files. The best files for this search on the use of intervention techniques with potential teenage suicides are clearly file 1 (ERIC) and 88 (IAC). This example also shows how the command RANK FILES can be used to arrange files in order of postings figures, which is particularly useful when checking a large group of files.

```
?select files psych not 7
You have 12 files in your file list.
  (To see banners, use SHOW FILES command)
?s teenage()suicide and intervention

Your SELECT statement is:
  s teenage()suicide and intervention

          Items    File
          -----    -----
             16      1: ERIC_1966-1997/Dec
              4     11: PsycINFO(R)_1967-1998/Jan
              2     37: Sociological Abstr._1963-1997/Dec
              2     46: A-V Online_1997/Dec. Q4
              4     86: Mental Health Abstracts_1969-1998/Feb
             26     88: IAC BUSINESS A.R.T.S._1976-1998/Feb 10
              1    121: Brit.Education Index_1976-1997/Q4
    7 files have one or more items; file list includes 12 files.
```

```
?rank files
Your last SELECT statement was:
  S TEENAGE()SUICIDE AND INTERVENTION

    Ref    Items     File
    ---    -----     -----
    N1        26      88: IAC BUSINESS A.R.T.S._1976-1998/Feb 10
    N2        16       1: ERIC_1966-1997/Dec
    N3         4      11: PsycINFO(R)_1967-1998/Jan
    N4         4      86: Mental Health Abstracts_1969-1998/Feb
    N5         2      37: Sociological Abstr._1963-1997/Dec
    N6         2      46: A-V Online_1997/Dec. Q4
    N7         1     121: Brit.Education Index_1976-1997/Q4
    N8         0      35: Dissertation Abstracts Online_1861-1998/Mar
    N9         0     111: Natl.Newspaper Index(SM)_1979-1998/Feb 10
    N10        0     142: Social Sciences Abstracts_1983-1997/Dec
    7 files have one or more items; file list includes 12 files.
```

Keep in mind there are no records available in DIALINDEX. All we have learned so far is which are the "best" files to search. We now need to change to the appropriate database in order to find the relevant documents.

Journal Name Finder

Another useful feature provided by DIALOG to aid in database selection is the Journal Name Finder (file 414). Like DIALINDEX, the Journal Name Finder contains information from all other files in the system. In this case, that information consists of which files contain citations to articles from individual journals. This is particularly useful if the user knows of a good journal or two in the field, or if the subject area is interdisciplinary—some fields of study cross several database boundaries, and material in good journals may escape notice because it is not in an obvious file.

Here is an example. There is no one good file available on DIALOG that covers the area of anthropology, and you encounter a user who is interested in urban anthropology. There is a good journal, *Urban Anthropology*, so the librarian searches the Journal Name Finder and see what files incorporate it. We begin the search with an EXPAND command, as there may be variant forms of the journal's name in different databases.

```
?b 414
File 414:DIALOG Journal Name Finder(TM) 1997/Oct
     (c) 1998 Dialog Corporation

    Set    Items     Description
    ---    -----     -----------
?e urban anthropol

    Ref    Items     Index-term
    E1         1     URBAN AND SOCIAL CHANGE REVIEW V 15 N 1 SPE
    E2         2     URBAN ANTHROP
    E3         1     *URBAN ANTHROPOL
    E4         1     URBAN ANTHROPOL STUD CULT SYST
    E5         9     URBAN ANTHROPOLOGY
    E6         3     URBAN ANTHROPOLOGY AND STUDIES OF CULTURAL SYS
    E7         1     URBAN ANTHROPOLOGY STUDIES OF CULTURAL SYSTE
    E8         1     URBAN APPALACHIAN ADVOCATE
    E9         1     URBAN CLIMATES SYMPOSIUM ON URBAN CLIMATES AN
```

```
    E10        2    URBAN COASTAL AREA MANAGEMENT THE EXPERIENCE
    E11        1    URBAN CONGESTION MANAGEMENT
    E12        1    URBAN DATA SERVICE REPORT V 8 N 12 DECEMBER

             Enter P or PAGE for more
?s e2,e3,e5
              2    URBAN ANTHROP
              1    URBAN ANTHROPOL
              9    URBAN ANTHROPOLOGY
    S1       12    E2,E3,E5
?t 1/5/1-3


 1/5/1
DIALOG(R)File 414:DIALOG Journal Name Finder(TM)
(c) 1998 Dialog Corporation. All rts. reserv.

 02100013
URBAN ANTHROPOLOGY     (JN=)
    DIALOG FILE     7: SOCIAL SCISEARCH(R) 1972-1997/NOV W1
                       (C) 1997 INST FOR SCI INFO
    This file contains BIBLIOGRAPHIC records.
    Number of Records for this Journal, 31 OCTOBER 1997: 589


 1/5/2
DIALOG(R)File 414:DIALOG Journal Name Finder(TM)
(c) 1998 Dialog Corporation. All rts. reserv.

 01962304
URBAN ANTHROPOLOGY     (JN=)
    DIALOG FILE    37: SOCIOLOGICAL ABSTR. 1963-1997/OCT
                       (C) 1997 SOCIOLOGICAL ABSTRACTS IN
    This file contains BIBLIOGRAPHIC records.
    Number of Records for this Journal, 31 OCTOBER 1997: 285


 1/5/3
DIALOG(R)File 414:DIALOG Journal Name Finder(TM)
(c) 1998 Dialog Corporation. All rts. reserv.

 01846758
URBAN ANTHROPOLOGY     (JN=)
    DIALOG FILE    48: SPORTDISCUS 1962-1997/OCT
                       (C) 1997 SPORT INFORMATION RESOURCE CENTR
    This file contains BIBLIOGRAPHIC records.
    Number of Records for this Journal, 31 OCTOBER 1997: 2
?sort 1/all/rc,d
    S2       12    Sort 1/ALL/RC,D
?report 2/jn,fn,rc/all

Align paper; press ENTER
?
```

```
DIALOG(R)File 414:DIALOG Journal Name Finder(TM)
  (c) 1998 Dialog Corporation All rts. reserv.
```

JOURNAL NAME	FILE NUMBER	RECORD COUNT
URBAN ANTHROPOLOGY	7	589
URBAN ANTHROPOLOGY	37	285
URBAN ANTHROPOLOGY	292	196
URBAN ANTHROPOLOGY	1	99
URBAN ANTHROPOLOGY	88	96
URBAN ANTHROPOLOGY	142	78
URBAN ANTHROPOL	142	78
URBAN ANTHROPOLOGY	50	27
URBAN ANTHROPOLOGY	162	7
URBAN ANTHROP	38	3
URBAN ANTHROPOLOGY	48	2
URBAN ANTHROP	39	1

This method of TYPEing provides a nice display, organized by file number, and helps to identify easily the most useful files—7, 37, and 292.

Saving Searches (SAVE)

The availability of access to so many different databases and the ability to use the same search strategy on several files is an important feature of the major online systems. However, such cross-file searching is not as simple as it might seem because files vary in content, record format, and searchable fields. It is important to realize that the search system may be inconsistent in the way in which it treats features such as prefix or suffix codes, parse rules, and limit qualifiers in different files. Extra effort is needed in the planning of a search that is to be run on multiple databases, and careful scrutiny of the documentation for each of the files is crucial.

The SAVE command enables the searcher to store a search strategy in the mainframe computer to use on another database or for use again at a later date. A stored strategy on DIALOG is known as a SearchSave, and there are three possible types of SearchSave:

- A *temporary* SearchSave, using the SAVE TEMP command, assigns a name to the search strategy and stores it for one week on the system mainframe machine. There are no storage charges for this type of SAVE, and the search will be erased automatically after seven days. This can be used to hold a search for a brief time while the searcher consults with documentation or the user. If the searcher will be offline for only a very short time, the LOGOFF HOLD command should also be considered. This will log the user off from DIALOG but will preserve the sets. The searcher can log back on within a half hour (on the same password), do a DS, and see that the sets are still there.
- A *standard* SearchSave, using the SAVE command, stores a search permanently at a nominal cost. This type of search is saved until released by the user. It is often used to store searches that may be accessed later as part of a library's current awareness service, or for hedges that can be used in the future as part of another search. *Hedges* are complicated blocks that include a great number of synonymous terms used to represent a single concept such as "secondary education," which the

searcher may well want to use again in the future. It can save a great deal of the effort involved in search preparation to be able to store such blocks for repeat use, when they can be combined with different concept blocks.

> *Saved searches are charged for storage on DIALOG's mainframe machine at a cost of 40 cents per month plus 15 cents per command line. – GW*

Here's an example of the use of such a hedge:

```
?b 1

File   1:ERIC   66-97/MAY.

    Set   Items    Description
    ---   -----    -----------

?exs sasec
    S1    57845    SECONDARY EDUCATION (EDUCATION PROVIDED IN GRADE
                   7, 8, OR 9 THRO
    S2     8208    JUNIOR HIGH SCHOOLS (PROVIDING FORMAL EDUCATION
                   IN GRADES 7, 8, A...)
    S3    14893    HIGH SCHOOLS (PROVIDING FORMAL EDUCATION IN GRADES
                   9 OR 10...)
    S4     1864    GRADE 9
    S5     1290    GRADE 10
    S6     1232    GRADE 11
    S7     1403    GRADE 12
    S8     3014    SECONDARY SCHOOLS
    S9      728    HIGH SCHOOL EQUIVALENCY PROGRAMS (ADULT EDUCATIONAL
                   ACTIVITIES CONC
    S10   83402    SECONDARY EDUCATION OR JUNIOR HIGH SCHOOLS OR HIGH
                   SCHOOLS OR GRADE 9 OR GRADE 10 OR GRADE 11 OR GRADE
?                  12 OR SECONDARY SCHOOLS OR HIGH SCHOOL EQUIVALENCY
                   PROGRAMS
?s science fiction
    S11     360    SCIENCE FICTION
?s s10 and s11
          83402    S10
            360    S11
    S12     114    S10 AND S11
?s s12/1989:1992
            114    S12
          78173    PY=1989 : PY=1992
    S13      11    S12/1989:1992
?t 13/8/1-4

 13/8/1
EJ421924           SE547242
  Science Fiction Stories with Reasonable Astronomy.
  Descriptors: *Astronomy; *Bibliographies; *College Science; Earth
Science ; Educational Resources; Higher Education; Physical Sciences;
Physics; Science Education; *Science Fiction; *Science Materials;
Secondary Education; *Secondary School Science; Space Exploration;
Space Sciences
  Identifiers: Planets; *Solar System
```

```
 13/8/2
EJ421125          CS741037
  Dragons, Dystopias, and Time Travel: Fantasy and Science Fiction
for Everyone (Books for the Teenage Reader).
  Descriptors: *Adolescent Literature; Adolescents; Annotated
Bibliographies; Book Reviews; *Fantasy; Reading Interests; Reading
Materials; *Science Fiction; Secondary Education


 13/8/3
EJ412339          SE546462
  Science Fiction Aids Science Teaching.
  Descriptors: *College Science; *Films; Higher Education; *Inservice
Teacher Education; *Physics; Postsecondary Education; Science
Education; *Science Fiction; *Scientific Concepts; Secondary
Education; Secondary School Science


 13/8/4
EJ406735          CS739668
  Using Film in the Humanities Classroom: The Case of "Metropolis."
  Descriptors: Class Activities; *Film Criticism; *Films; Popular
Culture; *Science Fiction; Secondary Education; Teaching Methods
  Identifiers: *Metropolis (Film); Weimar Republic
```

- A *current awareness* or *SDI* (Selective Dissemination of Information) SearchSave, using the SAVE ALERT command, is saved and automatically called up and executed on every new collection of update records as they are added to the selected database. It is stored permanently until released by the user, and the results will be sent to the searcher, either through the postal service or via DIALMAIL. Charges for this service vary by database, but the costs cover any number of search terms and a maximum of 25 records printed in full format. This command cannot be used on all files, so once again it is important to check the documentation carefully.

The use of this SDI service means that new information is received by the user automatically as soon as it is available, without the need for the searcher to log on repeatedly to check for new information. This type of current awareness service can be used to:

- Keep up-to-date with the latest research
- Monitor the activities of competitors
- Track product announcements
- Watch for new patents
- Stay abreast of the market

It is often useful to store a title or some comments using the comment feature * (an asterisk) as part of the SearchSave because this simplifies the identification of the offline prints when they arrive in the mail.

Combining SAVE with the DIALINDEX feature, we can see that by using the SAVE TEMP command it is possible to enter a search once in DIALINDEX in order to discover which files will provide the highest retrieval, and then move to each file in turn in order to retrieve actual records.

SearchSave strategies are prepared in the same way as regular searches, but only set-generating commands can be saved. Run a search online and then enter the command SAVE after TYPEing the results. All SELECT, SELECT STEPS, SORT, and PRINT commands that have been entered since the last BEGIN will be saved. Notice that SAVE does not store other commands (e.g., EXPAND, DISPLAY SETS, TYPE) that may have been entered during the same search because these commands relate to file-specific data.

The response from the system will confirm that the strategy has been stored and will assign it an identifying number consisting of three digits preceded by two letters. An attractive option allows the user to assign a three- to five-character name to a SAVEd search, making it easier to identify it in the future. Note that two letters will be automatically added to the front of the name chosen in order for the system to identify it. Make a note of this number for future reference. Here is an example:

```
File 191:Art Lit. Intl.(RILA) 1975-1989
       (c) 1989 The Paul Getty Trust-RILA

    Set    Items    Description
    ---    -----    -----------
?ss (church or churches or cathedral? ?) and byzantine and (style or
architecture)
    S1      5877    CHURCH
    S2      4602    CHURCHES
    S3      3481    CATHEDRAL? ?
    S4      2070    BYZANTINE
    S5      4677    STYLE
    S6     31854    ARCHITECTURE
    S7       416    (CHURCH OR CHURCHES OR CATHEDRAL? ?) AND BYZANTINE AND
                    (STYLE OR ARCHITECTURE)
?save temp arch
Temp SearchSave "TDARCH" stored
```

Note the name to remember is TDARCH.

In order to use a previously SAVEd search strategy, connect to the database in which the search will be run using a normal BEGIN command. Then enter the command EXECUTE (EX) or EXECUTE STEPS (EXS), followed by the serial number of the search. The search will be run as though each line of the search strategy were entered separately, with the set numbers being adjusted automatically. The command EXECUTE can be used, but it only returns a single set number (S1) for the complete search strategy. This makes it impossible to modify the search, a move that may well be necessary when searching a different file. The use of EXECUTE STEPS is thus preferable because it returns a set number for each command line of the stored search, enabling it to be easily modified by the use of additional SELECT commands. Note the difference in set numbers between these two examples, where we EXECUTE our SAVEd result on two different databases.

```
?b 179

File 179:Architecture DB 1987-1998/Jan
       (c) 1998 Royal Inst. of Brit. Architects

    Set    Items    Description
    ---    -----    -----------
?ex tdarch
           2685    CHURCH
           2960    CHURCHES
```

```
          1086     CATHEDRAL? ?
            62     BYZANTINE
          1310     STYLE
         26422     ARCHITECTURE
            16     (CHURCH OR CHURCHES OR CATHEDRAL? ?) AND BYZANTINE AND
                   (STYLE OR ARCHITECTURE)
    S1      16     Serial: TDARCH
?b 56

File 56:ARTbibliographies Modern 1974-1997/Jun
       (c) 1997 ABC-CLIO

    Set   Items    Description
    ---   -----    -----------
?exs tdarch
    S1     1428    CHURCH
    S2      654    CHURCHES
    S3      496    CATHEDRAL? ?
    S4      184    BYZANTINE
    S5    14044    STYLE
    S6    12418    ARCHITECTURE
    S7        9    (CHURCH OR CHURCHES OR CATHEDRAL? ?) AND BYZANTINE AND
                   (STYLE OR ARCHITECTURE)
```

Because a SearchSave is stored as a series of command lines, it is possible to review it without actually running the search through the use of the RECALL command with the search name (RECALL TDARCH in this example). It is also useful to be able to review all saved searches using the RECALL SAVE option. This will list all the serial numbers and names of searches that are stored under the password currently in use.

```
?recall temp
Name      Date      Time        Size
-------   --------  --------    ----
TDARCH    10feb98   14:49:42      1
```

When a SAVEd search is no longer needed it should be deleted from memory using the RELEASE command because all SAVEd searches incur ongoing storage charges. As a safety measure, searches can only be EXECUTEd or RELEASEd using the same password with which they were created. Here we are releasing the search we had previously SAVEd and EXECUTEd.

```
?release tdarch
TDARCH released
```

The sequence of commands when saving and using a search is thus:

```
begin ≤file number≥
select ≤search terms and logical combinations≥
save ≤name≥ (3 to 5 characters)
begin ≤another file number≥
execute steps ≤search name≥
release ≤search name≥
```

The sequence can, of course, be repeated in as many files as necessary, without the need to SAVE the search between each file. Remember, it is being SAVEd automatically until it is RELEASEd.

OneSearch™

The use of the SAVE TEMP command to move from file to file, repeating the same search, has been superseded on the DIALOG system by the development of an improved search feature known as OneSearch. This enables a group of databases to be accessed with a single BEGIN command, using both file numbers and DIALINDEX Subject Categories. The system responds with a list of the file banners for the selected databases and then the usual prompt for the search statement.

When using the OneSearch option, the search looks exactly like a search run on a single file, though the postings figures will be those for the whole group of files together. If separate postings figures for the individual files are required, enter the SET DETAIL ON command before entering the search strategy.

OneSearch tends to provide a confusing amount of detail when used with the SELECT STEPS or EXPAND commands across a range of databases, so be careful!

This is what our brain injury search looks like when using OneSearch:

```
?b 11,155, 151

SYSTEM:OS - DIALOG OneSearch
  File 11:PsycINFO(R) 1967-1998/May
        (c) 1998 Amer. Psychological Assn.
  File 155:MEDLINE(R) 1966-1998/Jul W3
        (c) format only 1998 Dialog Corporation
  File 151:HealthSTAR 1975-1998/Jun
        (c) format only 1998 The Dialog Corporation

    Set   Items    Description
    ---   -----    -----------

?s (head or brain)()injur? and (psychosocial or neuropsycholog?)
         146487    HEAD
         559642    BRAIN
         437818    INJUR?
          48618    (HEAD OR BRAIN)(W)INJUR?
          56944    PSYCHOSOCIAL
          41121    NEUROPSYCHOLOG?
    S1     3773    (HEAD OR BRAIN)()INJUR? AND (PSYCHOSOCIAL OR
                   NEUROPSYCHOLOG?)

?s s1 and adolescent? ?
          3773     S1
        144595     ADOLESCENT? ?
    S2    152      S1 AND ADOLESCENT? ?

?set detail on
DETAIL set on
?ds
```

```
Set    File    Items    Description
        11      1547
       155      1312
       151       914
S1              3773    (HEAD OR BRAIN)()INJUR? AND (PSYCHOSOCIAL OR
                         NEUROPSYCHOLOG?)
        11        82
       155        40
       151        30
S2               152    S1 AND ADOLESCENT? ?
```

Notice the difference once we SET DETAIL ON. We get the same results (152 postings), but we can see the breakdown of terms between the three files.

Records retrieved using OneSearch may be TYPEd, DISPLAYed, or PRINTed in the usual manner, save that all the records from the first file are displayed first, followed by all the records from the second file, and so on. A sampling of records from the full range of files can be viewed by using the FROM EACH option with the TYPE command.

For example, the command:

```
t s5/6/1-5 from each
```

will view the first five titles from each of the files searched, and is useful to provide a "flavoring" of the material retrieved.

```
?t 2/3/1-2 from each

 2/3/1              (Item 1 from file: 11)
DIALOG(R)File 11:PsycINFO(R)
(c) 1998 Amer. Psychological Assn. All rts. reserv.

01522928            1997-38595-016
Predictors of family functioning after traumatic brain injury in children
  and adolescents.
AUTHOR: Max, Jeffrey E.; Castillo, Carlos S.; Robin, Donald A.; Lindgren,
  Scott D.; Smith, Wilbur L.Jr.; Sato, Yutaka; Mattheis, Philip J.;
  Stierwalt, Julie A. G.
AUTHOR AFFILIATION: U Iowa, Hosps & Clinics, Dept of Psychiatry, Iowa City,
  IA, USA
JOURNAL: Journal of the American Academy of Child & Adolescent Psychiatry,
Vol 37(1) , 83-90, Jan, 1998


 2/3/2              (Item 2 from file: 11)
DIALOG(R)File 11:PsycINFO(R)
(c) 1998 Amer. Psychological Assn. All rts. reserv.

01510431            1997-04974-001
Neuropsychological sequelae of head injury in a New Zealand adolescent
  sample.
AUTHOR: Leathem, Janet M.; Body, Catherine M.
AUTHOR AFFILIATION: Massey U, Dept of Psychology, Psychology Clinic,
  Palmerston North, New Zealand
JOURNAL: Brain Injury, Vol 11(8) , 565-575, Aug, 1997
```

```
 2/3/83            (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
(c) format only 1998 Dialog Corporation. All rts. reserv.

09492469          98152734
  Assessment of syntax after adolescent brain injury: effects of memory on
test performance.
  Turkstra LS; Holland AL
  National Center for Neurogenic Communication Disorders, University of
Arizona, Tucson, USA.
  J Speech Lang Hear Res (UNITED STATES) Feb 1998, 41 (1) p137-49,
ISSN 1092-4388 Journal Code: CT1
  Contract/Grant No.: DC-01409, DC, NIDCD
  Languages: ENGLISH
  Document type: JOURNAL ARTICLE


 2/3/84            (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
(c) format only 1998 Dialog Corporation. All rts. reserv.

09484148          98153980
  Social and behavioural effects of traumatic brain injury in children.
  Andrews TK; Rose FD; Johnson DA
  Department of Psychology, University of East London, UK.
  Brain Inj (ENGLAND) Feb 1998, 12 (2) p133-8, ISSN 0269-9052
Journal Code: BRA
  Languages: ENGLISH
  Document type: CLINICAL TRIAL; JOURNAL ARTICLE


 2/3/123           (Item 1 from file: 151)
DIALOG(R)File 151:HealthSTAR
(c) format only 1998 The Dialog Corporation. All rts. reserv.

03255019          98144329
  Child and adolescent traumatic brain injury: correlates of injury
severity.
  Max JE; Lindgren SD; Knutson C; Pearson CS; Ihrig D; Welborn A
  Department of Psychiatry, University of Iowa, Iowa City, USA.
  Brain Inj (ENGLAND) Jan 1998, 12 (1) p31-40,
  ISSN: 0269-9052 JOURNAL CODE: BRA
  Contract/Grant No.: MH 31593 MH NIMH; MH 40856 MH NIMH; MHCRC 43271
  Languages: ENGLISH
  Document Type: JOURNAL ARTICLE


 2/3/124           (Item 2 from file: 151)
DIALOG(R)File 151:HealthSTAR
(c) format only 1998 The Dialog Corporation. All rts. reserv.

03204777          98015798
  Child and adolescent traumatic brain injury: psychiatric findings from a
paediatric outpatient specialty clinic.
  Max JE; Lindgren SD; Knutson C; Pearson CS; Ihrig D; Welborn A
  Department of Psychiatry, University of Iowa, Iowa City, USA.
  Brain Inj (ENGLAND) Oct 1997, 11 (10) p699-711,
  ISSN: 0269-9052 JOURNAL CODE: BRA
  Languages: ENGLISH
  Document Type: JOURNAL ARTICLE
```

Note how the record numbers move from 1 and 2 in file 11, to 83 and 84 in file 155, to 123 and 124 in file 151. It is particularly useful to use the REMOVE DUPLICATES (RD) command we mentioned earlier before TYPEing or PRINTing results when using OneSearch because of possible overlaps in file coverage. Using it on our previous example removes documents.

```
?rd s2
...examined 50 records (50)
...examined 50 records (100)
...examined 50 records (150)
...completed examining records
    S3       110     RD S2 (unique items)
```

Using the OneSearch option incurs no additional costs and in fact is probably cheaper than searching on a file-by-file basis. DIALOG tracks the time spent in each file during a OneSearch session, and charges accordingly. The search output is charged at the appropriate rate for each of the files used.

Problems of Multifile Searching

With the vast increase in the number of databases being produced today and the proliferation of full-text and nonbibliographic files, there has been an increase in the likelihood that coverage for almost any given topic will be found in a range of different files. Many, perhaps most, search topics now require the use of multiple files to obtain comprehensive results, even in areas as "isolated" as many fields in the humanities. It has become clear that one database alone will not provide comprehensive coverage of the literature of any field.[2]

Multifile searching is something of an art in itself. It certainly necessitates additional search preparation in the choice of search terms and the accurate use of prefix and suffix codes. It must be remembered that controlled vocabularies will vary between files, as will the availability of different Additional Indexes. This suggests that it will be preferable to use natural language with proximity operators. Lists of do's and don'ts that have appeared in the literature provide some useful suggestions regarding the problems that need to be addressed when searching multiple files[3]:

- Database documentation and thesauri are important as sources of terminology, but don't rely on a single controlled vocabulary.
- Prefer natural language terms linked by proximity operators because controlled vocabularies will vary.
- Use truncation to cover variant word forms and English/American spellings.
- Be particularly careful with classification numbers and prefix codes, as different fields may need to be ORed together to make sure that the concept is covered in all files.
- Note the variations in the punctuation of author's names in different files—use truncation if appropriate.

A couple more caveats: remember that if in more than one database, the sets are probably going to be much bigger than in a single file, so do not be thrown by big sets. Use

the FROM command to see what is in each file; if only one or two files contribute usable material, search in them only (again using FROM):

```
s madonna(1n)enthrone? from 56, 191
```

Also watch truncation; as we say in the free-text chapter, a little goes a long way, and that is especially true in a multifile search. Be especially careful truncating on author's names; there are many ways in which databases represent authors' names, and all the variant forms should be obtained, but be careful not to truncate too far:

```
s au=smith?
```

in five files is probably not a good idea!

Good preparation is always the key to successful searching. It is even more important when using multiple databases. Allow plenty of time for search preparation, and make full use of the available documentation.

Search Example

Here is an example of a full-blown search that makes use of many of the techniques discussed in this chapter.

```
?b 411

File 411:DIALINDEX(R)

DIALINDEX(R)
   (c) 1998 Knight-Ridder Info

*** DIALINDEX search results display in an abbreviated ***
*** format unless you enter the SET DETAIL ON command. ***
?sf psych,educat not 88
You have 13 files in your file list.
   (To see banners, use SHOW FILES command)
?s (premarital(n)(pregnan? or birth) or birth?(2n)(out(1w)wedlock)) and
((marital or marriage??)(2n)(satisfact? or stable or stability or
instability or well?))

Your SELECT statement is:
   s (premarital(n)(pregnan? or birth) or birth?(2n)(out(1w)wedlock)) and
((marital or marriage??)(2n)(satisfact? or stable or stability or
instability or well?))

          Items    File
          -----    -----
              5      1: ERIC_1966-1998/Mar
              1      7: Social SciSearch(R)_1972-1998/May W4
              6     11: PsycINFO(R)_1967-1998/May
              7     35: Dissertation Abstracts Online_1861-1998/May
              5     37: Sociological Abstr._1963-1998/Apr
              5     86: Mental Health Abstracts_1969-1998/May
              1    211: IAC Newsearch(TM)_1997-1998/May 26

    7 files have one or more items; file list includes 13 files.
```

```
?save temp preg

Temp SearchSave "TDPREG" stored
?rank files

Your last SELECT statement was:
   S (PREMARITAL(N)(PREGNAN? OR BIRTH) OR BIRTH?(2N)(OUT(1W)WEDLOCK)) AND
((MARITAL OR MARRIAGE??)(2N)(SATISFACT? OR STABLE OR STABILITY OR
INSTABILITY OR WELL?))

    Ref    Items    File
    ---    -----    -----
    N1         7     35: Dissertation Abstracts Online_1861-1998/May
    N2         6     11: PsycINFO(R)_1967-1998/May
    N3         5      1: ERIC_1966-1998/Mar
    N4         5     37: Sociological Abstr._1963-1998/Apr
    N5         5     86: Mental Health Abstracts_1969-1998/May
    N6         1      7: Social SciSearch(R)_1972-1998/May W4
    N7         1    211: IAC Newsearch(TM)_1997-1998/May 26
    N8         0     46: A-V Online_1998/Mar. Q1
    N9         0    111: Natl.Newspaper Index(SM)_1979-1998/May 22
    N10        0    121: Brit.Education Index_1976-1998/Q1

   7 files have one or more items; file list includes 13 files.

         - Enter P or PAGE for more -
```

We can now select our files using these N numbers.

```
?b n1:n5

SYSTEM:OS - DIALOG ONESEARCH
  FILE 35:DISSERTATION ABSTRACTS ONLINE 1861-1998/MAY
          (C) 1998 UMI
  FILE 11:PSYCINFO(R) 1967-1998/MAY
          (C) 1998 AMER. PSYCHOLOGICAL ASSN.
  FILE 1:ERIC 1966-1998/MAR
          (C) FORMAT ONLY 1998 THE DIALOG CORPORATION
  FILE 37:SOCIOLOGICAL ABSTR. 1963-1998/APR
          (C) 1998 SOCIOLOGICAL ABSTRACTS INC
  FILE 86:MENTAL HEALTH ABSTRACTS 1969-1998/MAY
          (C) 1998 IFI/PLENUM DATA CORP.

    SET    ITEMS    DESCRIPTION
    ---    -----    -----------

?exs

EXECUTING TDPREG
          3341    PREMARITAL
         28701    PREGNAN?
         48160    BIRTH
           262    PREMARITAL(N)(PREGNAN? OR BIRTH)
         53337    BIRTH?
        215068    OUT
           539    WEDLOCK
           168    BIRTH?(2N)OUT(1W)WEDLOCK
         51258    MARITAL
         56456    MARRIAGE??
```

```
        100290     SATISFACT?
         49646     STABLE
         53202     STABILITY
         13576     INSTABILITY
        385814     WELL?
          8763     (MARITAL OR MARRIAGE??)(2N)((((SATISFACT? OR STABLE) OR
                   STABILITY) OR INSTABILITY) OR WELL?)
    S1      28     (PREMARITAL(N)(PREGNAN? OR BIRTH) OR
                   BIRTH?(2N)(OUT(1W)WEDLOCK)) AND ((MARITAL OR
                   MARRIAGE??)(2N)(SATISFACT? OR STABLE OR STABILITY OR
                   INSTABILITY OR WELL?))

?rd s1

...completed examining records
    S2      21     RD S1 (UNIQUE ITEMS)
?t 2/8/1-2 from each


 2/8/1 (Item 1 from file: 35)
DIALOG(R)FILE 35:(C) 1998 UMI. ALL RTS. RESERV.

01621170           ORDER NO: AAD98-17965
MARRIAGE AS AN INSTITUTION: THEORY AND EVIDENCE (COMMITMENT, CHILD WELFARE,
COUPLES)
  DESCRIPTORS: ECONOMICS, LABOR ; SOCIOLOGY, INDIVIDUAL AND FAMILY STUDIES
  DESCRIPTOR CODES: 0510; 0628


 2/8/2 (ITEM 2 FROM FILE: 35)
DIALOG(R)FILE 35:(C) 1998 UMI. ALL RTS. RESERV.

01326135           ORDER NO: AAD94-01193
TRANSITIONS TO ADULTHOOD AMONG YOUNG WOMEN: THE SEQUENCING OF NEST-LEAVING,
MARRIAGE, AND FIRST BIRTH (WOMEN)
  DESCRIPTORS: SOCIOLOGY, DEMOGRAPHY; SOCIOLOGY, INDIVIDUAL AND FAMILY
               STUDIES; WOMEN'S STUDIES
  DESCRIPTOR CODES: 0938; 0628; 0453


 2/8/8 (Item 1 from file: 11)
DIALOG(R)FILE 11:(C) 1998 AMER. PSYCHOLOGICAL ASSN. ALL RTS. RESERV.

01132991           1991-32992-001
MARITAL STABILITY AND CHANGES IN MARITAL QUALITY IN NEWLY WED COUPLES: A
  TEST OF THE CONTEXTUAL MODEL.

DESCRIPTORS: *DEMOGRAPHIC CHARACTERISTICS; *MARITAL RELATIONS; *REMARRIAGE;
  *STEPCHILDREN; *PERSONALITY TRAITS; ADULTHOOD; SPOUSES; MARITAL STATUS;
  MARITAL SATISFACTION; LONGITUDINAL STUDIES
IDENTIFIERS: DEMOGRAPHIC & PERSONALITY CHARACTERISTICS & MARITAL HISTORY &
PRESENCE OF STEPCHILDREN, MARITAL QUALITY & STABILITY, NEWLYWEDS, 1 YR
STUDY
SUBJECT CODES & HEADINGS: 2953 (DIVORCE & REMARRIAGE)
```

```
 2/8/9 (ITEM 2 FROM FILE: 11)
DIALOG(R)FILE 11:(C) 1998 AMER. PSYCHOLOGICAL ASSN. ALL RTS. RESERV.

01035301           1990-04358-001
DEMOGRAPHIC DETERMINANTS OF DELAYED DIVORCE.

DESCRIPTORS: *DEMOGRAPHIC CHARACTERISTICS; *DIVORCE; *MARITAL RELATIONS;
  *PREDICTION; ADOLESCENCE; ADULTHOOD
IDENTIFIERS: PREDICTORS OF DELAYED DIVORCE & MARITAL STABILITY, 15-44 YR
OLD FEMALES
SUBJECT CODES & HEADINGS: 2953 (DIVORCE & REMARRIAGE)


 2/8/12 (ITEM 1 FROM FILE: 1)
DIALOG(R)FILE 1:(C) FORMAT ONLY 1998 THE DIALOG CORPORATION. ALL RTS.
RESERV.

EJ355111           UD512881
  SHOULD WE DISCOURAGE TEENAGE MARRIAGE?
  DESCRIPTORS: *ADOLESCENTS; ATTITUDE CHANGE; *EARLY PARENTHOOD; FAMILY
CHARACTERISTICS; FATHERS; *ILLEGITIMATE BIRTHS; *MARITAL INSTABILITY;
*MARRIAGE; MARRIED STUDENTS; *UNWED MOTHERS


 2/8/13            (ITEM 2 FROM FILE: 1)
DIALOG(R)FILE 1:(C) FORMAT ONLY 1998 THE DIALOG CORPORATION. ALL RTS.
RESERV.

EJ280692           CG524249
  EARLY MARRIAGE, PREMARITAL FERTILITY, AND MARITAL DISSOLUTION: RESULTS
FOR BLACKS AND WHITES.
  DESCRIPTORS: *CHRONOLOGICAL AGE; COHORT ANALYSIS; FAMILY PROBLEMS;
FEMALES; *ILLEGITIMATE BIRTHS; *MARITAL INSTABILITY; *PREGNANCY; *RACIAL
DIFFERENCES; *SPOUSES


 2/8/16 (ITEM 1 FROM FILE: 37)
DIALOG(R)FILE 37:(C) 1998 SOCIOLOGICAL ABSTRACTS INC. ALL RTS. RESERV.

290771             89W10729
A STUDY ON THE STABILITY OF FIRST MARRIAGE FOR MARRIED WOMEN OF
  CHILDBEARING AGE IN TAIWAN-AN EXPLORATION OF THE RELATIONSHIP OF AGE AT
  FIRST MARRIAGE, DIMENSIONS OF PREMARRIED PREGNANCY, AND MARITAL
  DECISION-MAKING
TITLE IN CHINESE
DESCRIPTORS: TAIWAN (D851100); FERTILITY (D298200); FECUNDITY (D294300);
  MARITAL RELATIONS (D490800); STABILITY (D828700)
IDENTIFIERS: FIRST MARRIAGE STABILITY, WOMEN OF CHILDBEARING AGE, TAIWAN;
  SURVEY DATA;
SECTION HEADINGS: SOCIAL WELFARE- MARITAL & FAMILY PROBLEMS (6144)


 2/8/17 (ITEM 2 FROM FILE: 37)
DIALOG(R)FILE 37:(C) 1998 SOCIOLOGICAL ABSTRACTS INC. ALL RTS. RESERV.

074245             76H7893
THE INSTABILITY OF TEENAGE MARRIAGE IN THE UNITED STATES; AN EVALUATION OF
  THE SOCIO-ECONOMIC STATUS HYPOTHESIS
```

```
DESCRIPTORS: MARRIAGE, MARRIAGES, MARITAL (259000); TEENAGE, TEENAGERS
  (456900); INSTABILITY (234976); SOCIOECONOMIC ; (SEE ALSO SOCIOECONOMIC
  STATUS) (434455)
IDENTIFIERS: SOCIOECONOMIC FACTORS OF INSTABILITY IN TEENAGE MARRIAGES
SECTION HEADINGS: THE FAMILY AND SOCIALIZATION- ADOLESCENCE & YOUTH (1939)


 2/8/18 (Item 1 from file: 86)
DIALOG(R)FILE 86:(C) 1998 IFI/PLENUM DATA CORP. ALL RTS. RESERV.

  0423895
  HER1982-19261
  DIVORCE RESEARCH: WHAT WE KNOW; WHAT WE NEED TO KNOW.
  DESCRIPTORS: FAMILY
  IDENTIFIERS: JOURNAL; HUMAN; OVERVIEW; NIMH; MH-22575


 2/8/19 (Item 2 from file: 86)
DIALOG(R)FILE 86:(C) 1998 IFI/PLENUM DATA CORP. ALL RTS. RESERV.

  0337194
  HER1979-29203
  DIVORCE AND SEPARATION: CONTEXT, CAUSES, AND CONSEQUENCES.
  DESCRIPTORS: FAMILY; CHILD-CHILD AND FAMILY STUDIES
  IDENTIFIERS: BOOK; HUMAN; OVERVIEW; HISTORY
?DS
```

This set looks good and offers a good example of the use of REMOVE DUPLICATES. We are searching in five files here, and there are 21 unique documents in that original set of 28. Viewing the same document over and over again is a waste of money, and so for reasonable-sized sets (say, under 100), RD is a nice technique. It would appear that we got some good results here. If we wanted to, we could pearl grow using some of the terms from the best documents here: MARITAL RELATIONS, PARENTHOOD STATUS, MARITAL INSTABILITY, PREGNANCY, DIVORCE, and the like.

Notes

1. K. L. Nolan, ed. (1998), *Gale Directory of Databases* (Detroit: Gale).

2. Geraldene Walker (October 1990), "Searching the Humanities: Subject Overlap and Search Vocabulary" *Database* 13(5): 37–46.

3. Donald T. Hawkins (April 1978), "Multiple Database Searching" *Online* 2(2): 9–15.

Additional Reading

Bjorner, Susan N. (November 1990), "One-Minute Management on DIALOG: Is One-Search an Answer?" *Online* 14: 52–59.

Ojala, M. (1991), "Locating Companies with DIALOG's Company Name Finder," *Database* 15(2): 87–91.

Pagell, Ruth A. (1988), "OneSearch: How and When to Use It," *Database* 11(4): 39–46.

Snow, Bonnie (January 1991), "When One Database Isn't Enough: Creating Composite Bibliographies on DIALOG or BRS," *Online* 15: 82–86.