

Developing Dialog Searching Expertise

Part 4:

**Power Searching
Techniques**

March 2001

DIALOG
—★—™
A THOMSON COMPANY

Seminar Development Team

Patricia Currie Blume, Dialog Cincinnati MA USA
Client Training Staff

©2001

The Dialog Corporation

Dialog Customers are hereby granted permission to reproduce a reasonable number (not to exceed 25) copies for their own use or for use within Customer's organization. All reproduced copies must contain Dialog's copyright notice (including partial copies). Other reproduction shall require the express consent of Dialog.

Dialog and The Dialog Corporation logo are trademarks of The Dialog Corporation and its subsidiaries.

TABLE OF CONTENTS

Preface.....	iii	
Section 1: Reviewing Dialog Basics		
Introduction.....	1-1	
Small Group Exercise.....	1-2	
Summary of Dialog Commands	1-2	
Section 2: Power Search Techniques		2-1
Application 1: Using RANK to Analyze Your Search Results	2-1	
What is the RANK command?	2-1	
Application 2: Using Online Thesauri.....	2-10	
The EXPLODE Feature	2-10	
Application 3: Using the MAP Command	2-13	
Application 4: Creating an Alert	2-20	
Summary.....	2-22	
Online Practice	2-23	
Section 3: Special Techniques for Special Files		
Application 1: Searching Numeric Data.....	3-1	
Range Searching	3-2	
Relational Operators.....	3-3	
Individual Exercise	3-5	
Equivalent Methods of SELECTing Numbers	3-6	
Practice Exercise	3-9	
Application 2: Working with Images	3-10	
Application 3: Duplicate Detection in Patent Files	3-13	
Application 4: SELECT STEPS in Trademark Files	3-16	
Online Practice	3-20	
Section 4: Customizing Your Dialog Search Experience		4-1
Application 1: Setting up and Modifying a User Profile	4-2	
Application 2: Creating a Customized Set Using the Keep Command	4-5	
Online Practice.....	4-12	
Wrap-up.....		4-13
Summary.....	4-13	
What's Next	4-13	
Other Dialog Training Tools	4-14	
Appendices		
Appendix A: SET Commands.....	A-1	
Appendix B: Answers to Practice Exercises	A-2	

Introduction

Dialog is the world's largest databank of information, providing access to more than 500 different collections known as databases. Some databases include references and abstracts for published literature, business information and financial data; others contain complete text of articles and news stories; others contain statistical tables and directories. On the Dialog search system, a single basic command language is used to locate and look at information from any of these databases.

Note: Although this seminar focuses on command-mode searching, Dialog also provides an easy-to-use Web interface as shown in Part 1 of *Developing Dialog Searching Expertise*. The techniques shown in this seminar can also be performed on DialogWeb if that is your interface of choice.

Purpose

This seminar provides a brief review of basic skills and presents more advanced commands and techniques to enable you to more fully use the power and sophistication of the Dialog system.

This seminar is designed to:

- Acquaint you with advanced techniques for using the RANK and MAP command
- Provide instruction on using the online thesauri including the EXPLODE command
- Understand special features that are important when searching for numeric data

Audience

This seminar is intended for searchers who attended Parts 1 and 2 of *Developing Dialog Searching Expertise*, have been searching for several months, and now want to enhance their skills and learn the use of techniques and features to enhance search expertise. The seminar assumes knowledge of basic system commands at the levels presented in Parts 1 and 2 of *Developing Dialog Searching Expertise* or one of the introductory online courses.

How to Use this Workbook

Your instructor will guide you through various learning experiences and exercises to present the seminar content. This book provides “outline notes” and space to write your own notes or questions. The workbook is meant to be written on—use it to record what you learn during this seminar.

Available Help

Dialog provides Knowledge Center phone support at 800-3-Dialog (800-334-2564) five days a week.

Seminar Overview

This seminar is divided into four sections:

1. Review of Dialog Basic Commands
2. Power Search Techniques
3. Special Techniques for Special Files
4. Customizing your Dialog Experience

Materials

This workbook provides attendees with the order of information presented, practice exercises to reinforce what you have learned, and Appendices. Additional materials are included with the workbook.

Class Time

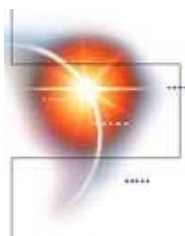
The class is scheduled for 3 hours with group and individual activities, as well as online practice sessions.

Learning Objectives:

Attendees will understand more advanced aspects of searching the Dialog system by:

- Using advanced RANK command options to perform a statistical analysis of search results
- Taking advantage of online thesauri and the EXPLODE command
- Using MAP to extract search terms from a set of records in order to create a new search incorporating those terms
- Using techniques for numeric searching
- Customizing output





SECTION 1: REVIEWING DIALOG BASICS

In this section you will review:

- Dialog basic commands
- Using suffixes and prefixes
- TYPing out records in predefined formats
- Using Dialog OneSearch

Introduction

Congratulations on completing *Developing Dialog Searching Expertise*, Fast Start through Advanced. Before you learn about some of Dialog's powerful special features and commands, a short review is in order.

In Part 1, Fast Start, you learned about DialogWeb, how to use the Databases Finder Tool, and the basic search commands: BEGIN, SELECT, and EXPAND. Search operators AND, OR and the NEAR operator (N) were introduced. Displaying, printing, and saving search results were also illustrated.

In Part 2, Intermediate, you expanded your familiarity with Dialog by learning about the text-only Dialog Classic interface. In addition, the DISPLAY SETS (DS), ADD, REPEAT, and TYPE commands and display formats were introduced. Also illustrated were more search operators: WITH (W), SAME PARAGRAPH (S). Part 2 introduced you to the Bluesheets and Basic and Additional Index fields. Finally, the Databases Finder Tool, DIALINDEX, was presented.

In Part 3, Advanced, many tools and strategies for finding the right database were introduced, particularly the Bluesheets Database and Finder Files. Database-specific features, such as controlled vocabularies and the RANK command, were shown, along with how to save yourself time with the SAVE command. Techniques for controlling your Dialog output, from small to customized reports, were discussed and illustrated.

In Part 4, Power Searching Techniques, you will learn about the most specialized Dialog commands and features for adding "Power Searching" to your repertoire of Dialog skills.

Small Group Exercise

For this exercise, you will work in groups of 3 or 4 persons. Your instructor will give each group a set of cards. Each card will have a Dialog command printed on it. The task of the group will be to arrange the set of cards in the sequence necessary for the commands to execute correctly on Dialog. Each set represents a single search strategy.

Set 1: There are two versions of each command: one is correct; one incorrect. Arrange the correct commands in the proper order.

Set 2: Arrange each command in the proper order.

Set 3: For this set, each card contains only one word or number. Your task is to assemble all of the individual pieces into a coherent sequence of commands.

Summary of Dialog Commands

Dialog's powerful search system allows you to retrieve just the information you need, quickly and precisely. Below is a summary of the five basic commands, truncation, proximity connectors, logical operators, search saves, and the EXPAND command. Additional commands introduced in *Part 3: Advanced* are also listed. You will see many of these commands used throughout *Developing Dialog Searching Expertise, Part 4: Power Searching* as you learn about new features .

The Five Basic Commands

BEGIN begin 6
 b 630,636
 b papersmj, not 630

EXPAND e co=milton bradley
 expand au=jones d

SELECT select skelly
 s game or toy
 s s1 and s2

TYPE type s#/format/range of records
 t s1/3/1,6
 t s3/6/1-2 from each
 t s3/9/1 from 148

LOGOFF logoff bye
 quit stop

Common Formats

3 – Bibliographic 6 – Titles
8 – Titles/indexing 9 – Complete record
k – Terms in context

Truncation

s lemon?	Retrieves lemon, lemons, lemonade, lemonbutter
s lemon??	Retrieves lemon, lemons
s lemon? ?	Retrieves lemon, lemons
s l?mon	Retrieves limon, lemon

Display Sets

Displays the set history since the last BEGIN command

Proximity Connectors

(n) s game?(n)board?	Retrieves words next to each other in any order. Example: game boards or board games
(w) s indoor(w)game?	Retrieves words next to each other in the order expressed. Example: indoor game or indoor games
(#n) s game(2n)board	Retrieves words that are up to # words apart in any order. Example: the board for the game is missing
(#w) s game(5w)board	Retrieves words that are # words apart in the order expressed. Example: the game is played on a board
(s) s game(s)board	Retrieves words in the same paragraph in full-text databases.

Logical Operators

AND	s skelly and game	Retrieves all records that contain all of the search terms.
OR	s game or toy	Retrieves all records that contain at least one of the search terms.
NOT	s game not toy	Eliminates a search term or group of search terms.

Note: When AND and OR are used in the same search statement put the ORed terms in parentheses.

Saving Searches

SAVE TEMP	Temporarily saves search strategy for seven days.
EXECUTE STEPS	Executes that strategy at a later time while still online.

OneSearch

Use OneSearch categories to search multiple files at the same time or to create your own categories.

Example: ?b medicine
 ?b patfull, 340
 ?b 2,6,8

The EXPAND Command

BEGIN in the appropriate database
EXPAND on the name of the field (CO= or AU=)
SELECT the appropriate E number(s)
TYPE out the record

```
?e au=brostoff, s
```

```
Ref    Items  Index-term
E1      1  AU=BROSTOFF, ANITA
E2      2  AU=BROSTOFF, GEORGE
E3      0  *AU=BROSTOFF, S
E4      2  AU=BROSTOFF, STEPHEN
E5      2  AU=BROSTOFF, STEVE
E6     1908  AU=BROSTOFF, STEVEN
E7      1  AU=BROSTROM, NATHAN
E8      1  AU=BROSTROM, RICHARD
E9      1  AU=BROSVIC, D
E10     1  AU=BROSZ, ALAN
E11     1  AU=BROSZ, TIM
E12     1  AU=BROSZEIT, RICHARD K.
```

Enter P or PAGE for more

```
?s e4:e6
```

```
S1     1912  AU="BROSTOFF, STEPHEN":AU="BROSTOFF, STEVEN"
```

By using the EXPAND command, you can see if you entered the name correctly. By looking at the EXPAND list above, you are able to determine that there are different spellings used in the entries for the same name.

The ADD/REPEAT Commands

Use ADD to add files to an in-progress search and REPEAT to regenerate existing sets to include the added file(s). At any point in a search, simply enter ADD followed by one or more file numbers (or category names), and the new file(s) will be added immediately to your search. You can continue searching, with no change to sets created prior to your ADD command, or you can enter REPEAT to regenerate your previous sets to include the new files. You can also REMOVE DUPLICATES (RD) from all files included in the OneSearch session.

Example:

```
?b 156
?s calcium(n)(powder? or dust)
?add 72,5,399
?repeat
?s s1 and (toxic? or toxin? or adverse or
poison? or hazard?)
?rd
?t s3/3/1-3 from each
```

Description:

```
Begin in one file with a search strategy.

Add additional files and repeat the previous
search without re-entering it.

Modify the original search.

Remove duplicate records from all files.
Type records from each database.
```

The RANK Command

Use the Dialog RANK feature to analyze search results in the business files. RANK must be used with phrase-indexed data. For instance, you can identify which companies are most involved in a particular product or service by searching on the subject in any database that has a Company Name (CO=) field and then RANKing the set by CO or RANK on the Journal Name to see which journals cover the subject strategy.

Example:

?b 9
?s shampoo
?rank co

Description:

Identify companies most involved in a product or service by RANKing using CO for company name.

The SORT/REPORT Commands

SORT Search Results: To create a list of the major players within an industry, be sure to SORT by sales, employee total, or other variables. One useful search is to SORT records by sales in descending order. Design your REPORT in tabular format, by choosing elements (eg. company name, city, and phone number) for each column. Consult the Bluesheets for SORT options and for appropriate elements to display in a REPORT.

Example:

?sort s1/all/sa,d
?report s2/co,cy,te/1-20

Description:

SORT all of the results in Set 1 by sales from highest to lowest sales.
Create a report of the top 20 companies.
Include the city where each company is located and its telephone number.

The Report Titles Command

Several databases on Dialog divide report information into individual pages so that you can pull up only the pages that meet your needs. These files include *Investext* (File 545), *SEC Online* (Files 541-544), *ICC International Business Research* (File 563), *EIU Country Analysis* (File 627), *Country Risk and Forecasts* (File 628) and the MARKETFULL collection of fulltext market research report databases.

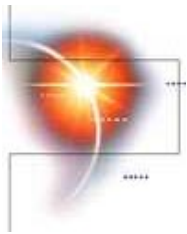
Example:

```
?b 545  
?s kraft/co  
?report s1/titles
```

Description:

REPORT TITLES is a preformatted report that creates a menu of reports that are available on a given company, industry, or market. You can retrieve the table of contents to select individual pages or select the full report.





SECTION 2: POWER SEARCH TECHNIQUES

This section illustrates techniques for taking advantage of the most powerful aspects of Dialog's search language. At the end of this section you will be able to:

- Use advanced RANK command options to perform a statistical analysis of your search results and present that information in a useful way
- Take advantage of online thesauri and the EXPLODE command
- Use MAP to extract search terms from a set of records in order to create a new search incorporating those terms
- Create an Alert using Command Dialog.

Application 1: Using Rank to Analyze Your Search Results

What is the Rank Command?

The RANK command provides the ability to perform trend or statistical analysis on an existing search set. The Dialog system extracts terms from the specified field(s) in a set of records and lists them in ranked order, with the most highly posted term appearing first. To use this command, simply enter RANK and the desired field(s) (e.g., RANK PA). Each ranked term is also assigned a "rank number" that can be used to save a term for later use or to display desired records while in the RANK menu. Once a term is ranked, a list showing the top eight terms appears on your screen in a format that allows you to browse throughout the entire listing. RANK can be used in OneSearch or in single databases.

After you enter RANK followed by a field code (e.g. RANK CO) you will be prompted with menu options to customize your RANK information in the following ways:

- Add a title to ranked output
- Receive continuous output
- Sort ranked terms alphabetically
- Include such items as percentages, total database counts, and file-specific counts in a ranked list in a OneSearch® session
- Sort numeric entries in descending order

Topic: Use RANK to determine which companies are most often written about with respect to genetically modified foods.

```

File      9:Business & Industry(R)  Jul/1994-2000/Oct 24
          (c) 2000 Resp. DB Svcs.

          Set  Items  Description
          ---  ----  -
?s genetically()(altered or modified())food?
          2705  GENETICALLY
          4006  ALTERED
          8673  MODIFIED
          257495 FOOD?
          S1    174  GENETICALLY()(ALTERED OR MODIFIED())FOOD?
?rank co
Started processing RANK
...Ranking 100 of 174 records
Completed Ranking 174 records
DIALOG RANK Results
-----

RANK: S1/1-174  Field: CO=  File(s): 9
(Rank fields found in 82 records -- 109 unique terms) Page 1 of 14

RANK No.  Items  Term
-----
          1      10  MONSANTO CO
          2         4  ICELAND
          3         4  ICELAND GROUP PLC
          4         3  GENETIC ID
          5         2  AMERICAN HOME PRODUCTS CORP
          6         2  CARREFOUR SA
          7         2  FRITO-LAY INC
          8         2  HHCL & PARTNERS
P = next page      Pn = Jump to page n
P- = previous page M = More Options      Exit = Leave RANK

To view records from RANK, enter VIEW followed by RANK number,
format and item(s) to display, e.g.,
VIEW 2/9/ALL.

```

Use the RANK command to rank the company names.



Choose "M" to see the customizing options.

Enter desired option(s) or enter RANK number(s) to save terms.

?m

RANK Options:

ALPHA = Alphabetize results (T)ITLE = Add a title
 DESC = Descending results (C)OMBINE = Merge results
 CONT = Continuous display (V)IEW = Display records
 (V 1/3/1-5)
 DETAIL = Detailed display CLEAR = Clear saved term(s)
 PERCENT = Include percentages EXIT = Leave RANK

"x" = Display terms starting with x (where x is up to 46 alpha-numeric characters); quotes must be used, e.g., "IBMC" (Use RANK to return to full RANK display)

Instead of obtaining only the company name and number of items, Detail indicates other statistical data.

Enter desired option(s) or enter RANK number(s) to save terms.

?detail

DIALOG RANK Results (Detailed Display)

 RANK: S1/1-174 Field: CO= File(s): 9
 (Rank fields found in 82 records -- 109 unique terms) Page 1 of 14

RANK No.	Items in File	Items Ranked	%Items Ranked	Term
1	1283	10	12.2%	MONSANTO CO
2	55	4	04.9%	ICELAND
3	37	4	04.9%	ICELAND GROUP PLC
4	6	3	03.7%	GENETIC ID
5	756	2	02.4%	AMERICAN HOME PRODUC...
6	306	2	02.4%	CARREFOUR SA
7	232	2	02.4%	FRITO-LAY INC
8	59	2	02.4%	HHCL & PARTNERS

P = next page Pn = Jump to page n
 P- = previous page M = More Options Exit = Leave RANK

To view records from RANK, enter VIEW followed by RANK number, format, and item(s) to display, e.g., VIEW 2/9/ALL.

Enter desired option(s) or enter RANK number(s) to save terms.

You can bypass the menu and enter any of the customization options in a single command line (e.g. RANK PA S2/ALL CONT ALPHA DETAIL).

Topic: You'd like to identify experts writing on the effect of global warming on the world's coral reefs. A DIALINDEX search will indicate which files are best for your search. The RANK command will help you develop a more effective search and also easily identify who is writing most about the topic.

SET FILES to the marine category and SELECT key terms in one search statement.

Note: SHOW FILES will list all of the databases in the Marine DIALINDEX category.

```
File 411:DIALINDEX(R)

DIALINDEX(R)
(c) 2000 The Dialog Corporation plc

*** DIALINDEX search results display in an abbreviated ***
*** format unless you enter the SET DETAIL ON command. ***
?sf marine
  You have 16 files in your file list.
  (To see banners, use SHOW FILES command)
?s coral()reef?(s)global()warming

Your SELECT statement is:
s coral()reef?(s)global()warming

      Items   File
      -----
        7     5: Biosis Previews(R)_1969-2000/Oct W5
        2     6: NTIS_1964-2000/Nov W2
        5    28: Oceanic Abst._1964-2000/Oct
        3    29: Meteor.& Geoastro.Abs._1970-2000/Nov
       13    34: SciSearch(R) Cited Ref Sci_1990-2000/Oct W3
       17    44: Aquatic Sci&Fish Abs_1978-2000/Oct
        4    89: GeoRef_1785-2000/Oct B2
        7    94: JICST-EPlus_1985-2000/Jun W3
        2    96: FLUIDEX_1973-2000/Aug
        7    99: Wilson Appl. Sci & Tech Abs_1983-2000/Sep
        4   117: Water Resour.Abs._1967-2000/Sep
        8   185: Zoological Record Online(R)_1978-2000/Oct
       17   292: GEOBASE(TM)_1980-2000/Oct

      13 files have one or more items; file list includes 16 files.

?save temp
Temp SearchSave "TD589" stored

?b hits

SYSTEM:OS - DIALOG OneSearch
  File  5:Biosis Previews(R)  1969-2000/Oct W5
        (c) 2000 BIOSIS
  File  6:NTIS  1964-2000/Nov W2
        Comp&distr  2000 NTIS, Intl Copyright All Right
  .
  .
  .
  File 185:Zoological Record Online(R)  1978-2000/Oct
        (c) 2000 BIOSIS
  File 292:GEOBASE(TM)  1980-2000/Oct
        (c) 2000 Elsevier Science Ltd.

Set  Items  Description
---  ---
?exs
Executing TD589
```

```

51156 CORAL
77921 REEF?
339510 GLOBAL
47198 WARMING
S1      96  CORAL( )REEF?(S)GLOBAL( )WARMING
    
```

```

?rd
...examined 50 records (50)
...completed examining records
S2      61  RD (unique items)
    
```

RANK the descriptors to see which terms are indexed most often.

```

?rank de
>>>The DE field is not available for RANK in file(s):185
Started processing RANK
Completed Ranking 55 records
DIALOG RANK Results
-----
RANK: S2/1-61  Field: /DE  File(s):
5,6,28,29,34,44,89,94,96,99,117,185,292
(Rank fields found in 48 records -- 363 unique terms) Page 1 of 46
    
```

RANK No.	Items	Term
1	13	GLOBAL WARMING
2	11	CORAL REEFS
3	9	CARBON DIOXIDE
4	8	CORAL REEF
5	8	GREENHOUSE EFFECT
6	7	CLIMATIC CHANGES
7	6	CARBON COMPOUND
8	6	CARBON GROUP ELEMENT COMPOUND

```

P = next page      Pn = Jump to page n
P- = previous page M = More Options      Exit = Leave RANK
    
```

By RANKing the descriptors, we can identify very relevant indexing terms to incorporate into our search.

To view records from RANK, enter VIEW followed by RANK number, format, and item(s) to display, e.g., VIEW 2/9/ALL.

Enter desired option(s) or enter RANK number(s) to save terms.
?1,2,4,5

```

RANK numbers saved: 1-2,4-5
DIALOG RANK Results
-----
RANK: S2/1-61  Field: /DE  File(s):
5,6,28,29,34,44,89,94,96,99,117,185,292
(Rank fields found in 48 records -- 363 unique terms) Page 1 of 46
    
```

The rank list and menu will display again after you select the item numbers you want to use.

RANK No.	Items	Term
1	13	GLOBAL WARMING
2	11	CORAL REEFS
3	9	CARBON DIOXIDE
4	8	CORAL REEF
5	8	GREENHOUSE EFFECT
6	7	CLIMATIC CHANGES
7	6	CARBON COMPOUND
8	6	CARBON GROUP ELEMENT COMPOUND

```

P = next page      Pn = Jump to page n
P- = previous page M = More Options      Exit = Leave RANK
    
```

To view records from RANK, enter VIEW followed by RANK number,

format, and item(s) to display, e.g., VIEW 2/9/ALL.

Enter desired option(s) or enter RANK number(s) to save terms.

→ ?**exit;y**

RANK results will be erased; have you saved all the terms of interest?
(YES/NO)

Creating temporary SearchSave ... TD589

Enter EXS to execute the SearchSave
?**exs**

Executing TD589

```
S3 10921 "GLOBAL WARMING"/DE
S4 8655 "CORAL REEFS"/DE
S5 2225 "CORAL REEF"/DE
S6 9329 "GREENHOUSE EFFECT"/DE
S7 28889 S3:S6
```

Incorporate your original search strategy by combining it with the new synonym for "global warming" obtained from the RANKed list.

→ ?**s s1 or s6**

```
104 S1
9329 S6
S8 9416 S1 OR S6
```

?**s s4 or s5**

```
8655 S4
2225 S5
S9 10767 S4 OR S5
```

Combine the "coral reef" terms and AND together the resulting sets.

→ ?**s s8 and s9**

```
9416 S8
10767 S9
S10 85 S8 AND S9
```

?**rd**

...examined 50 records (50)
...completed examining records

S11 65 RD (unique items)

Here we're asking for a continuous display of author names in alphabetical order.

→ ?**rank au cont alpha**

Started processing RANK
Completed Ranking 65 records
Press ENTER to alphabetize TOP 50 terms
or enter a number N to alphabetize the top N terms
or >N to alphabetize terms with more than N items
or enter ALL to alphabetize all terms

?**all**

Enter title for continuous output or press ENTER for current title option

Add a title to your RANKed list.

→ ?**Experts on the effect of global warming on coral reefs**

Adding title to results...

EXPERTS ON THE EFFECT OF GLOBAL WARMING ON CORAL REEFS

RANK: S11/1-65 Field: AU= File(s):
5,6,28,29,34,44,58,89,94,96,99,117,1...

(Rank fields found in 64 records -- 118 unique terms)


```
-----  
RANK: S11/1-65   Field: AU=   File(s):  
5,6,28,29,34,44,58,89,94,96,99,117,1...  
(Rank fields found in 64 records -- 118 unique terms) Page 1 of 15  
>>>The * indicates a user-precombined rank term;  
>>>use DETAIL option to see which terms are precombined.
```

Note that the RANKed list is reordered with the asterisk indicating the combined RANK term.

RANK No.	Items	Term
1	3	BUDEMEIER, R W
2	3	KAYANE HAJIME
3*	2	DUSTAN P.
4	2	KINSEY, D W
5	2	RAJAMANICKAM, G V (ED)
6	2	SMITH, S V
7	1	ABE MANABU
8	1	ANRAKU MASATERU

P = next page Pn = Jump to page n
P- = previous page M = More Options Exit = Leave RANK

To view records from RANK, enter VIEW followed by RANK number, format, and item(s) to display, e.g., VIEW 2/9/ALL.

Enter desired option(s) or enter RANK number(s) to save terms.

Application 2: Using Online Thesauri

Some Dialog databases include a thesaurus -- a dictionary of subject headings -- as part of the online file. The thesaurus entries are usually indexed as descriptors in the database and appear as full phrases, including punctuation and spaces (with the exception of single-word headings).

To view an online thesaurus, enter the EXPAND command followed by a search term. If thesaurus terms are available in the database, an extra column will appear in the EXPAND display. This extra column is labelled RT (for Related Terms). Thesaurus terms in the EXPAND display will have a number in the RT column that indicates the number of related terms that are available.

To view the related terms for an entry, enter a second EXPAND command, followed by the E number for the entry of interest. The resulting display will be similar to an EXPAND display, however, the entry numbers will begin with R instead of E (e.g., R1, R2, etc.).

If an R-numbered list also has an RT column, you can further EXPAND the R numbers to view subsequent related terms lists.

Within most R-numbered lists, a column labeled "Type" shows the hierarchical relationships among the terms in the list. Typical entries in this column include:

- F Use for
- U Use
- N Narrower term
- B Broader term
- R Related term

At any point, you can select appropriate reference numbers to create sets of terms.

The EXPLODE Feature

The EXPLODE capability for thesaurus terms is used to obtain retrieval of all occurrences of a specified search term plus all narrower related terms. The EXPLODE feature uses the SELECT command and the exclamation (!) mark as a "truncation" symbol to request retrieval.

Example: select carcinoma!

If EXPLODE is used with thesaurus terms for which no narrower terms exist, the system will return results for the single term and display a message indicating that there are no narrower terms.

Topic: Use the online thesaurus for *CAB Abstracts* (File 50) to identify appropriate descriptors for the topic of genetic engineering.

File 50:CAB Abstracts 1972-2000/Sep
(c) 2000 CAB International

Set Items Description
--- ----

?e genetic engineering

One option is to EXPAND on the term.

Ref	Items	RT	Index-term
E1	1		GENETIC ENGINEERING
E2	1		GENETIC ENGINEERED MICROORGANISMS
E3	11990	11	*GENETIC ENGINEERING
E4	1		GENETIC ENGINEERING - PRINCIPLES AND METHODS,
E5	1		GENETIC ENGINEERING ALPHA -AMYLASE
E6	2		GENETIC ENGINEERING ALPHA -LACTALBUMIN
E7	6		GENETIC ENGINEERING AND CHALLENGES IN INFANT N
E8	1		GENETIC ENGINEERING AND PLANT BREEDING
E9	2		GENETIC ENGINEERING BETA -CONGLYCININ
E10	1		GENETIC ENGINEERING DICTIONARY
E11	1		GENETIC ENGINEERING FOR CROP IMPROVEMENT
E12	1		GENETIC ENGINEERING FUNDAMENTALS

EXPAND again to see the related terms.

Enter P or PAGE for more

?e e3

Ref	Items	Type	RT	Index-term
R1	11990		11	*GENETIC ENGINEERING
R2	0	F	1	GENETIC MANIPULATION
R3	113529	B	63	GENETICS
R4	3150	N	5	GENE TRANSFER
R5	98521	R	7	BIOTECHNOLOGY
R6	264	R	2	DIRECT DNA UPTAKE
R7	1042	R	2	ELECTROPORATION
R8	321	R	3	GENE THERAPY
R9	12864	R	8	GENETIC TRANSFORMATION
R10	34768	R	10	MOLECULAR GENETICS
R11	3408	R	6	TRANSDUCTION
R12	4672	R	1	TRANSGENICS

Another option is to EXPAND your search term in parentheses, which takes you immediately to the second EXPAND level without having to EXPAND on an E# first.

?e (genetic engineering)

Ref	Items	Type	RT	Index-term
R1	11990		11	*GENETIC ENGINEERING
R2	0	F	1	GENETIC MANIPULATION
R3	113529	B	63	GENETICS
R4	3150	N	5	GENE TRANSFER
R5	98521	R	7	BIOTECHNOLOGY
R6	264	R	2	DIRECT DNA UPTAKE
R7	1042	R	2	ELECTROPORATION
R8	321	R	3	GENE THERAPY
R9	12864	R	8	GENETIC TRANSFORMATION
R10	34768	R	10	MOLECULAR GENETICS
R11	3408	R	6	TRANSDUCTION
R12	4672	R	1	TRANSGENICS

The EXPLODE command lets you incorporate narrower levels of the subject hierarchy without SELECTing from a series of EXPANDED lists. Use the exclamation point (!) following the term(s).

```

?s genetic engineering!
      S1  13626  GENETIC ENGINEERING!

?s s1 and human()consumption
      13626  S1
      161026 HUMAN
      69484  CONSUMPTION
      2106   HUMAN(W)CONSUMPTION
      S2    16   S1 AND HUMAN()CONSUMPTION

?t 2/6/1-3

2/6/1
03938441  CAB Accession Number: 20001417527
The nutritional significance, biosynthesis and bioavailability
of glucosinolates in human foods.

2/6/2
03872697  CAB Accession Number: 20001005268
Cauliflower mosaic viral promoter - a recipe for disaster?

2/6/3
03692870  CAB Accession Number: 991001343
Comparison of fumonisin concentrations in kernels of transgenic
Bt maize hybrids and nontransgenic hybrids.

```

Application 3: The MAP Command

The MAP command lets you extract search terms from a specified field in a record or group of records, and create a SearchSave of those terms. The SearchSave then can be executed in either the same file in which it was created or in a new file. MAP eliminates the need to scan records for terms of interest and then re-key them into your search strategy. Among those fields most commonly mapped are CAS Registry Numbers, Patent Numbers, and DUN's numbers.

Topic: You're interested in identifying minority-owned businesses in the U.S. with sales greater than \$100 million, many of which are private. Finding fulltext news articles about them may give you more information about these companies than you'll find anywhere else. The MAP command makes it easy to move from one kind of search (directory) into another (fulltext).

Command Summary

B 516
 S sf=minority owned
 and sa>100m
 Sort s1/all/sa,d
 Set v 0
 Report s2/co,st/1-50
 Map dn t
 B 635;exs
 S
 s20/fulltext,1999:2000
 T s21/8/1-5
 s dn=00-325-6534
 s s22 not s21
 t s23/8/1-5

Use D&B's indexing to limit your search to minority-owned businesses with sales greater than \$100 million.

```
File 516:D & B - Duns Market Identifiers 2000/Aug
(Copr. 2000 D&B)

Set  Items  Description
---  -
?s sf=minority owned and sa>100m
      348649 SF=MINORITY OWNED
      22737 SA>100M
      S1      246 SF=MINORITY OWNED AND SA>100M

?sort s1/all/sa,d
      S2      246 Sort S1/ALL/SA,D

?set v 0
      Lines per Page set to 0.

?report s2/co,st/1-50

Align paper; press ENTER
?

DIALOG(R)File 516:D & B - Duns Market Identifiers
(Copr. 2000 D&B) All rts. reserv.

Company
Name
-----
State
-----

State Farm Mutual Automobile I IL
Fmr Corp. MA
U S West Communications Group, CO
Tap Holdings Inc (del) IL
Synnex Information Technologie CA
Federal Deposit Insurance Corp DC
Southern Wine & Spirits of Ame FL
Metropolitan Mortgage Services NJ
Save Mart Supermarkets Inc CA
Mutual of America Life Insuran NY
Whiting-Turner Contracting Com MD
```

```

Apollo Ski Partners L.P.          NY
Chiquita Processed Foods, Llc   WI
.
.
Boeing Company, The (inc)       CA
Nibco Inc                       IN
Austin Industries Inc Delaware  TX
Global Financial Inc           FL
Bg Distribution Partners, Ltd   TX
Levinson, Harold Associates In  NY
Washington Metropolitan Area T  DC
City Public Service            TX
Johnson Publishing Company, In  IL
Servco Pacific Inc             HI
Chemoil Corporation            CA
    
```

Be sure to use T for temporary so you don't get charged for a permanently saved search.

→ ?map dn t
Processing MAP
Processing MAP

Business Dateline (File 635) focuses on regional business news and is a good source of information on private companies.

```

20 Select Statement(s), 246 Search Term(s)
Serial#TD587
?b 635
File 635:Business Dateline(R) 1985-2000/Oct 25
(c) 2000 Bell & Howell
    
```

We can use the DUNS number field in our MAP strategy because *Business Dateline* indexes by the DUNS number too.

```

Set Items Description
---
?exs
Executing TD587
.
.
S1
.
.
    
```

In this case, EXECUTing the MAP command resulted in the creation of 20 sets.

```

S20 1347 S1:S19
?s s20/fulltext,1999:2000
    
```

Limit the search results to fulltext articles only published between 1999 and 2000.

```

45 S20/FULLTEXT
196563 PY=1999 : PY=2000
S21 45 S20/FULLTEXT,1999:2000
?t 21/8/1-5
    
```

```

21/8/1
DIALOG(R)File 635:(c) 2000 Bell & Howell. All rts. reserv.
    
```

```

2106986 62067476
Brokerage takes exception to FDIC statements
Oct 2, 2000
WORD COUNT: 475
DATELINE: Salt Lake City Utah
    
```

```

COMPANY NAMES: Grubb & Ellis Co, DUNS:00-922-8198, Ticker:GBE,
                NAICS:531210 233110 524210
                Utah Realty, NAICS:531210
                Federal Deposit Insurance Corp, DUNS:00-325-6534 ,
    
```

NAICS:524128
CLASSIFICATION CODES: 8360 (Real estate); 7100 (Market research)
DESCRIPTORS: Commercial real estate; Vacancies; Office buildings;
Market surveys; Overexpansion
PRINT MEDIA ID: 12025

21/8/2
DIALOG(R)File 635:(c) 2000 Bell & Howell. All rts. reserv.

2105389 61738989
FBA wants to double FDIC limit
Sep 29, 2000
WORD COUNT: 1,184
DATELINE: Miami Florida

COMPANY NAMES: **Federal Deposit Insurance Corp, DUNS:00-325-6534** ,
NAICS:524128
CLASSIFICATION CODES: 8110 (Commercial banking); 4310 (Regulation)
DESCRIPTORS: Banking industry; Regulatory agencies; Insurance
coverage; Disputes
PRINT MEDIA ID: 14028

21/8/3
DIALOG(R)File 635:(c) 2000 Bell & Howell. All rts. reserv.

2105211 61017167
FDIC asks court to deny release of funds to Keystone defendants
Sep 25, 2000
WORD COUNT: 641
DATELINE: Bluefield West Virginia

COMPANY NAMES: **Federal Deposit Insurance Corp, DUNS:00-325-6534** ,
NAICS:524128
First National Bank of Keystone-West Virginia,
NAICS:522110
CLASSIFICATION CODES: 8100 (Financial services industry); 3100
(Capital & debt management)
DESCRIPTORS: Banking industry; Legal fees; Financing; Government
agencies
PRINT MEDIA ID: 12305

21/8/4
DIALOG(R)File 635:(c) 2000 Bell & Howell. All rts. reserv.

2104253 61771671
Local real estate experts downplay FDIC warning
Sep 28, 2000
WORD COUNT: 788
DATELINE: Jacksonville Florida

By looking at several records, we see that FDIC is mentioned a lot. But we're not really interested in the Federal Deposit Insurance Corporation.

COMPANY NAMES: **Federal Deposit Insurance Corp, DUNS:00-325-6534** ,
NAICS:524128
CLASSIFICATION CODES: 8360 (Real estate)
DESCRIPTORS: Commercial real estate; Supply & demand
PRINT MEDIA ID: 7604

21/8/5
 DIALOG(R)File 635:(c) 2000 Bell & Howell. All rts. reserv.

 2102446 60818649
 HEAVY HITTERS in commercial real estate: Environmental Award - HOK
 Environmental
 Sep 18, 2000

 WORD COUNT: 703
 DATELINE: St Louis Missouri

 COMPANY NAMES: Hellmuth Obata & Kassabaum Inc, DUNS:00-633-5251 ,
 NAICS:541310 541330
 CLASSIFICATION CODES: 8370 (Construction & engineering industry);
 9110 (Company specific)
 DESCRIPTORS: Architectural services; Commercial real estate;
 Awards & honors; Environment; Data bases; Construction contracts
 NAMED PERSONS: Odell, William
 PRINT MEDIA ID: 14026

Using Format 8 in our TYPE command let us see what the DUNS number is for FDIC. Now we can eliminate it from our search strategy.

?s dn=00-325-6534
 S22 525 DN=00-325-6534

 ?s s21 not s22
 45 S21
 525 S22
 S23 25 S21 NOT S22

?t 23/8/1-5

 23/8/1
 DIALOG(R)File 635:(c) 2000 Bell & Howell. All rts. reserv.

 2102446 60818649
 HEAVY HITTERS in commercial real estate: Environmental Award - HOK
 Environmental
 Sep 18, 2000
 WORD COUNT: 703
 DATELINE: St Louis Missouri

 COMPANY NAMES: Hellmuth Obata & Kassabaum Inc, DUNS:00-633-5251 ,
 NAICS:541310 541330
 CLASSIFICATION CODES: 8370 (Construction & engineering industry);
 9110 (Company specific)
 DESCRIPTORS: Architectural services; Commercial real estate;
 Awards & honors; Environment; Data bases; Construction contracts
 NAMED PERSONS: Odell, William
 PRINT MEDIA ID: 14026

23/8/2
 DIALOG(R)File 635:(c) 2000 Bell & Howell. All rts. reserv.

 2101492 59751994
 Infonet Reveals Big Appetite for Acquisition in Bid for Equant;
 Deals: Onetime low-key firm is emerging as a major player in the
 highly competitive data communications field.
 Sep 9, 2000
 WORD COUNT: 983
 DATELINE: El Segundo California

 COMPANY NAMES: Infonet Services Corp, DUNS:19-342-5923 , SIC:7375
 7379, NAICS:514191

Equant, NAICS:511210
CLASSIFICATION CODES: 2330 (Acquisitions & mergers)
DESCRIPTORS: Strategic planning; Internet; Telecommunications
industry; Acquisitions & mergers
PRINT MEDIA ID: 7683

23/8/3

DIALOG(R)File 635:(c) 2000 Bell & Howell. All rts. reserv.

2100867 59634207

Infonet Reportedly Is Back in Talks to Purchase Equant; Telecom:
Acquisition of the Dutch company by the El Segundo-based firm
would create a huge global data network.

Sep 6, 2000

WORD COUNT: 464

DATELINE: El Segundo California

COMPANY NAMES: Infonet Services Corp, DUNS:19-342-5923 , SIC:7375
7379, NAICS:514191

Equant, NAICS:511210
CLASSIFICATION CODES: 2330 (Acquisitions & mergers)
DESCRIPTORS: Negotiations; Strategic planning; Acquisitions &
mergers
PRINT MEDIA ID: 7683

23/8/4

DIALOG(R)File 635:(c) 2000 Bell & Howell. All rts. reserv.

2100262 60271625

Canadian natural gas company buys interest in Slope lease
Sep 10, 2000

WORD COUNT: 435

DATELINE: Anchorage Alaska

COMPANY NAMES: AEC Oil & Gas, NAICS:211111

Arctic Slope Regional Corp, DUNS:07-663-7073 ,

NAICS:234990 454311 513340 485999

Anadarko Petroleum Corp, DUNS:13-933-0708,

Ticker:APC, NAICS:211111

CLASSIFICATION CODES: 8340 (Electric, water & gas utilities); 2330
(Acquisitions & mergers); 1310 (Foreign investment in the US)

DESCRIPTORS: Equity stake; Natural gas industry; Foreign
investments in the US

PRINT MEDIA ID: 12920

23/8/5

DIALOG(R)File 635:(c) 2000 Bell & Howell. All rts. reserv.

2096513 59284610

HOK lights up distinctive St. Louis area monuments

Aug 28, 2000

WORD COUNT: 914

DATELINE: St Louis Missouri

COMPANY NAMES: Hellmuth Obata & Kassabaum Inc, DUNS:00-633-5251 ,
NAICS:541310 541330

CLASSIFICATION CODES: 8370 (Construction & engineering industry);
2130 (Executives)

DESCRIPTORS: Lighting; Architectural services; Executives

NAMED PERSONS: Kaczowski, Tom

PRINT MEDIA ID: 14026

MAP can be used to extract search terms from a specified record or group of records, and search them in another database that uses a different field label for the same data element (e.g. extracting company names (CO=) from one database into a file that assigns a PA= (patent assignee) label to company names).

Topic: Locate the U.S. patent records in the past year for cited patents for Creutzfeld Jakob disease, a disease of humans related to BSE (bovine spongiform encephalopathy), also known as Mad Cow Disease.

<p>Command Summary</p> <p>B 654 S jakob(n)creutzfeld? S s1/2001 Map ct t/pn= B 351 Exs</p>	<pre>?b 654 File 654:US Pat.Full. 1990-2001/Feb 20 (c) format only 2001 The Dialog Corp. Set Items Description --- ---- - ?s jakob(n)creutzfeld? 1203 JAKOB 280 CREUTZFELD? S1 219 JAKOB(N)CREUTZFELD? ?s s1/2001 219 S1 27278 PY=2001 S2 7 S1/2001 ?map ct t/pn= 10 Select Statement(s), 144 Search Term(s) Serial#TD456 ?b 351 File 351:Derwent WPI 1963-2000/UD,UM &UP=200110 (c) 2001 Derwent Info Ltd Set Items Description --- ---- - ?exs Executing TD456 1 PN=BE 859912 0 PN=CH 5635436 1 PN=EP 124363 1 PN=EP 196515 1 PN=EP 334679 1 PN=EP 402637 1 PN=EP 627221 1 PN=JP 3218313 1 PN=JP 3223288 1 PN=JP 61275228 0 PN=US 2720485 0 PN=US 3019168 0 PN=US 3333583 0 PN=US 3339264 1 PN=US 3686395 S1 9 PN=BE 859912 + PN=CH 5635436 + PN=EP 124363 + PN=EP 196515 + PN=EP 334679 + PN=EP 402637 + PN=EP 627221 + PN=JP 3218313 + PN=JP 3223288 + PN=JP 61275228 + PN=US 2720485 + PN=US 3019168 + PN=US 3333583 + PN=US 3339264 + PN=US 3686395 1 PN=US 3743480 1 PN=US 3779706</pre>
<p>SELECT keyword(s) and restrict to the current year's patents.</p>	<p>→</p>
<p>MAP Cited Patent numbers from File 654 (MAP CT), and change the field code to Patent Number (PN=) to be searched in File 351, <i>Derwent World Patents Index</i>. This will allow you to locate all patent records for the cited patents.</p>	<p>→</p>
<p>EXECUTE the MAPped terms .</p>	<p>→</p>

```

1 PN=US 3940249
1 PN=US 3950536
1 PN=US 3962252
1 PN=US 4008136
1 PN=US 4021551
1 PN=US 4039413
1 PN=US 4071412
1 PN=US 4083991
1 PN=US 4124598
1 PN=US 4150134
1 PN=US 4160644
1 PN=US 4197088
S2 14 PN=US 3743480 + PN=US 3779706 + PN=US 3940249 +
      PN=US 3950536 + PN=US 3962252 + PN=US 4008136 +
      PN=US 4021551 + PN=US 4039413 + PN=US 4071412 +
      PN=US 4083991 + PN=US 4124598 + PN=US 4150134 +
      PN=US 4160644 + PN=US 4197088
1 PN=US 4250139
1 PN=US 4251437
1 PN=US 4268279
1 PN=US 4291034
1 PN=US 4294818
1 PN=US 4308249
1 PN=US 4314061
1 PN=US 4321919
1 PN=US 4325715
1 PN=US 4370264
1 PN=US 4398031
1 PN=US 4401647
1 PN=US 4402318
1 PN=US 4409105
S3 14 PN=US 4250139 + PN=US 4251437 + PN=US 4268279 +
      PN=US 4291034 + PN=US 4294818 + PN=US 4308249 +
      PN=US 4314061 + PN=US 4321919 + PN=US 4325715 +
      PN=US 4370264 + PN=US 4398031 + PN=US 4401647 +
      PN=US 4402318 + PN=US 4409105
1 PN=US 4411518
1 PN=US 4436821
1 PN=US 4472509
1 PN=US 4481219
1 PN=US 4503039
1 PN=US 4521405
1 PN=US 4540573
1 PN=US 4545987
1 PN=US 4613501
1 PN=US 4620908
1 PN=US 4661349
1 PN=US 4666829
1 PN=US 4683120
1 PN=US 4684521
S4 14 PN=US 4411518 + PN=US 4436821 + PN=US 4472509 +
      PN=US 4481219 + PN=US 4503039 + PN=US 4521405 +
      PN=US 4540573 + PN=US 4545987 + PN=US 4613501 +
      PN=US 4620908 + PN=US 4661349 + PN=US 4666829 +
      PN=US 4683120 + PN=US 4684521
1 PN=US 4693981
1 PN=US 4704273
1 PN=US 4705685
1 PN=US 4727027
1 PN=US 4729959
1 PN=US 4748120
1 PN=US 4755684
1 PN=US 4764369

```

```

1 PN=US 4788139
1 PN=US 4816416
1 PN=US 4820805
1 PN=US 4837160
1 PN=US 4841023
1 PN=US 4866073
S5 13 PN=US 4693981 + PN=US 4704273 + PN=US 4705685 +
    PN=US 4727027 + PN=US 4729959 + PN=US 4748120 +
    PN=US 4755684 + PN=US 4764369 + PN=US 4788139 +
    PN=US 4816416 + PN=US 4820805 + PN=US 4837160 +
    PN=US 4841023 + PN=US 4866073
1 PN=US 4866282
1 PN=US 4870018
1 PN=US 4874690
1 PN=US 4877866
1 PN=US 4878891
. . .
1 PN=US 5026566
1 PN=US 5030200
1 PN=US 5049589
1 PN=US 5053121
1 PN=US 5053423
1 PN=US 5059619
1 PN=US 5118673
S7 14 PN=US 4971760 + PN=US 4973327 + PN=US 4992272 +
    PN=US 5000951 + PN=US 5004355 + PN=US 5008201 +
    PN=US 5011695 + PN=US 5026566 + PN=US 5030200 +
    PN=US 5049589 + PN=US 5053121 + PN=US 5053423 +
    PN=US 5059619 + PN=US 5118673
0 PN=WO 899003187
1 PN=WO 9001563
1 PN=WO 9012581
1 PN=WO 9014841
. . .
1 PN=WO 9531996
1 PN=WO 9620197
S8 11 PN=WO 899003187 + PN=WO 9001563 + PN=WO 9012581
    + PN=WO 9014841 + PN=WO 909103933 + PN=WO
    9106665 + PN=WO 9106843 + PN=WO 9116819 + PN=WO
    9207957 + PN=WO 9208807 + PN=WO 94078961 + PN=WO
    9420500 + PN=WO 9531996 + PN=WO 9620197
1 PN=WO 9626959
1 PN=WO 9719084
1 PN=WO 9813369
S9 3 PN=WO 9626959 + PN=WO 9719084 + PN=WO 9813369
S10 100 S1:S9

```

Application 4: Creating an Alert to Keep Track of a Company or Industry

Dialog Alerts is the current awareness service that is available for most regularly updated Dialog databases. This service provides you with an easy, cost-effective way to keep up-to-date on new technologies, research activities, the competition, new laws or regulations, or issues that directly affect your area of science, business, industry, or intellectual property. The Dialog Alerts service allows you to have a search run automatically and regularly keeping you informed of new developments and important news. Once established, a Dialog Alerts profile will automatically deliver results directly to constituents, thus allowing a broad base of clients to be served. Any routine search that you run often is a candidate for an Alerts profile.

Topic: Abgenix is a company that has found a way to insert human genes into mice to create exceptional laboratory animals. Set up an ALERT in File 9 to track any new information about this company and its activities.

Command Summary

B 415
 Edit address email
 B 9
 S abgenix/co
 Save alert abgen
 pr s1/full/all pro addr
 adpat

Before creating your Alert search strategy, you must create and save the address to which the results will be sent.

It is a good idea to give your address a name so you can find it later if you need to delete or modify it.

```

File 415:DIALOG Bluesheets(TM) 2000/Oct 02
(c) 2000 The Dialog Corporation plc

Set Items Description
-----
?edit address email

Please choose an Electronic Mail Delivery Option:
1. Internet
2. MCI Mail(R)
3. X.400
4. Lotus Notes

Q = Quit H = Help
?1
Internet address sample format: name@domain.type

Enter address information for E-Mail (Internet) delivery

Q = Quit H = Help

Internet address

?patricia_currie@dialog.com
1. Internet address PATRICIA_CURRIE@DIALOG.COM

This address will be used for E-Mail (Internet) delivery:

Internet address PATRICIA_CURRIE@DIALOG.COM

S = Save address C = Change address Q = Quit H = Help
To name the address, enter S plus up to 6 characters (e.g., S
JSMITH). Enter a command.

?s pat
Address is saved as "ADPAT".

?b 9

File 9:Business & Industry(R) Jul/1994-2000/Oct 02
(c) 2000 Resp. DB Svcs.

```

```

      Set  Items  Description
      ---  -
?s abgenix/co
      S1      74  ABGENIX/CO
    
```

?save alert abgen

PRO (for Print Results Only) will cause only your search results to be delivered, not the search strategy.

The Alert will be saved.
Enter a PRINT statement to be used in your Alert or Q to QUIT.

?pr s1/full/all pro addr adpat

Address "ADPAT" is used for E-Mail (Internet) delivery:
Internet address PATRICIA_CURRIE@DIALOG.COM

Some databases offer a choice of Alert frequencies. In those databases, the default frequency will be applied unless you specify a different frequency (e.g. save alert abgen day).

Do you want to use this address?
Y = Yes N = No

?y
Enter the next PRINT statement or enter S to SAVE or Q to QUIT.

?s
"DDABGEN" stored as a Weekly Alert in File 9.

If you need to delete an Alert use the RECALL ALERTS command followed by the RELEASE command:

Use RECALL ALERTS to see a list of all your Alerts.

?recall alerts

Name	Date	Time	Size	File	Frequency
DDABGEN	03oct00	14:06:43	3	9	Weekly
DDMIRCOR	02oct00	18:05:06	3	624	Weekly

RELEASE followed by the Alert name will delete the Alert.

?release ddabgen

DDABGEN released
?

Summary

RANK

- The RANK command provides the ability to perform trend or statistical analysis on an existing search set. RANK also provides features that enable the searcher to customize the RANKed terms.

The RANK command works in most phrase-indexed Additional Index fields. RANK works with all MAP fields.

RANK DE

Online Thesauri

- Some databases offer an online thesaurus. To view an online thesaurus, enter the EXPAND command followed by a search term.

EXPAND transgenics

- To view the related terms for an entry, enter a second EXPAND command, followed by the E number for the entry of interest.

EXPAND E3

MAP

- The MAP command creates a SearchSave of extracted data from field xx (where xx is a prefix-code search field).

MAP PN

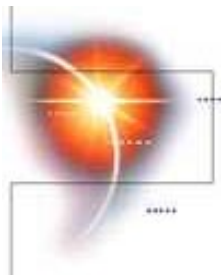
MAP PN TEMP

Online Practice

Try the following practice exercises to reinforce what you learned in this section. Check your answers with samples located in Appendix B.

1. Use File 654 (*U.S. Patents Fulltext*) to determine which companies hold the most patents for transgenic plants. Display as a continuous list in alphabetical order. Then COMBINE entries that are the same company but indexed differently.
2. Use *Chemsearch* (File 398) to identify CAS registry numbers and synonyms for the anti-depressant drug Zoloft (EXPAND on the NA=field using the name Zoloft). Then map the drug synonyms and CAS Registry numbers (use the File 398 MAP code SYRN), into File 154 to find out what adverse effects are associated with this drug.
3. Use the online thesaurus of *Energy Science & Technology* (File 103) to identify the appropriate search terms to use for the concept of global warming.





Section 3: Special Techniques for Special Files

This section contains several different applications relating to some of the special files in the Dialog collection of databases. For example, there is an abundance of numeric information in Dialog records. This information can be found in either the text of a record or in special fields, in both directory and scientific/technical files. In this section we will explore some of the techniques used to search for numeric information using the special indexing available. Several databases on Dialog have images, such as some of the patent and trademark files. We will identify ways to look for records with images. Finally, this section covers the procedure for removing duplicate records from a set of patent records, as well as using special commands in the trademark files. Applications 3 and 4 will illustrate these techniques.

At the end of this section, you will be able to:

- Use the special indexing in the databases to obtain numeric data
- Retrieve trademark and patent images
- Remove duplicate records from the patent databases
- Use the `SELECT STEPS` command in the trademark files

Application 1: Searching Numeric Data

When numeric information is searchable in a separate field, it is usually numerically indexed. Numeric indexing provides:

- Easy access to special bits of data in a record
- Easy input of numbers
- Numeric range searching
- Searching with relational operators

You can identify those databases that contain numeric data by doing a search in the Dialog Bluesheets (File 415):

- Use IN= to identify files with a particular type of indexing. In this case, search on numeric indexing using IN=NUMERIC.
- Use NF= to identify files searchable by the name of a field (e.g. nf=electron()volt?).
- Use SP= to identify files searchable with a specific prefix (e.g. sp=te).

Examples of Numeric Fields in Dialog files include:

Database Name/Number	Special Fields	Search Techniques
D&B Market Identifiers (File 516)	EM= Employees Total NE= Number of Executives SA= Sales SG= Sales Growth	S EM>100 S NE=5:10 S SA>100m S SG>50%
INSPEC (File 2)	BW= Bandwidth PX= Picture Size TE= Temperature (Kelvin)	S BW>5E7 S PX=512 S TE=3.26E2
Material Safety Data Sheets (File 332)	AP= Autoignition point DN= Density	S AP=450:460 S DN=0.90

Table 3-1: Numeric Fields

There are two ways of selecting a numeric range: Range Searching (using the colon) and Relational Searching (using relational operators). *Note:* Truncation cannot be used to search on a range of numbers.

Range Searching

In most numeric data searches, you will search for a **range** of numeric values. Use the colon (:) in your SELECT statement to separate the upper and lower limits of the range. For example, to retrieve records containing information about a mass between 10,000 and 20,000 you would enter one of the following statements:

```
S MA=10000:20000
S MA=10,000:20,000
S MA=10K:20K
```

S MA=10E3:20E3
S MA=1E4:20E3

Relational Operators

Relational operators provide an alternative search technique. You can use the following four operators:

> greater than
< less than
>= greater than or equal to (same as =>)
<= less than or equal to (same as =<)

Note: The system is not sensitive to order when these symbols are used together.

Topic: Find out which companies are spending the most on web or internet-based advertising.

MW is the field code for identifying media spending on the web.

File 177:Adv.& Agency Red Books:Advertisers 2000/Sep
(c) 2000 Reed Elsevier Inc

```
Set  Items  Description
---  -
?s  mw=>500k
      S1      7  MW=>500K
```

```
?t 1/6/all
```

```
1/6/1
00009678
SBC Communications, Inc.
```

```
NUMBER OF CORP. AFFILIATES: 7
NRPC COMPANY NUMBER: 010318000
```

```
1/6/2
00006402
Kyocera Mita America, Inc.
```

```
NUMBER OF CORP. AFFILIATES: 1
NRPC COMPANY NUMBER: 028540060
```

```
1/6/3
00005709
Info USA, Inc.
```

```
NUMBER OF CORP. AFFILIATES: 1
NRPC COMPANY NUMBER: 018355000
```

. . . .

```
1/6/6
00001055
Avis Rent A Car, Inc.
```

```
NUMBER OF CORP. AFFILIATES: 5
NRPC COMPANY NUMBER: 071024000
```

```
1/6/7
00001007
Australian Tourist Commission

NUMBER OF CORP. AFFILIATES:    1
NRPC COMPANY NUMBER: 016196000
```

Numeric indexing is expressed differently in different databases. In *INSPEC* (File 2) the data for each numerically indexed field is separated into a different prefix field. For example, there are fields for

```
Temperature (TE=)
Frequency (FR=)
Energy (EN=)
```

among many others. These elements are indexed by the database producer and are displayed using a common NI (Numeric Indexing) display code. Other files contain numeric information of handbook or directory data. In these databases, each bit of numeric data has a different field prefix and display code. For example, melting point and boiling point data, which have their own fields for searching and displaying, use the prefixes MP= and BP=, respectively.

The database Bluesheet provides definitions and examples for the available prefixes and display codes. Numeric fields may be highlighted in a separate section on the Bluesheet or they can be distributed in the Additional Index section (see the excerpts from File 2 on page 3-4).

When you examine a Bluesheet for a file with Numeric Indexing, consider the following points:

- ❶ Check the Indexing column in the Additional Indexes or look for a box that says “Numerical Indexing Fields.”
- ❷ Refer to the Select Examples for help in creating SELECT statements to retrieve numerical data.
- ❸ Check the units of measure to see if they match the units you want to search. (If not, you may need to do some conversion.)
- ❹ Check the footnotes and special helps on the Bluesheets. File 2 has a special box with helps for numeric indexing. Footnotes can provide hints for searching a field or special information.
- ❺ Note any dates indicating when a field(s) may have come into use.

Individual Exercise:

Refer to the excerpt below to find answers to the following questions:

1. What prefix would you use in *INSPEC* to search for Baud Rate (or bits per second)?
2. How would you write a SELECT command to search for articles discussing printer speed greater than 200 cps?

Numerical Indexing Fields (available since January 1987)				
AG=	NI	Age (yr; Year)	Numeric	S AG>=1E9
AL=	NI	Altitude (m; Meter)	Numeric	S AL=2E4:9E5
AP=	NI	Apparent Power (VA; Volt-amp)	Numeric	S AP=3E6
BI=	NI	Bit Rate (Bit/s; Bits per Second)	Numeric	S BI=64000
BW=	NI	Bandwidth (Hz; Hertz)	Numeric	S BW=5E7
BY=	NI	Byte Rate (Byte/s; Bytes per Second)	Numeric	S BY=2.5E6
CA=	NI	Capacitance (F; Farad)	Numeric	S CA=2E-13
CD=	NI	Conductance (S; Seimen)	Numeric	S CD=2.5
CE=	NI	Computer Execution Rate (IPS; Instructions per Sec.)	Numeric	S CE>=1E6
CM=	NI	Computer Speed (FLOPS)	Numeric	S CM>=3.5E6
CU=	NI	Current (A; Ampere)	Numeric	S CU=0.051
DI=	NI	Distance (m; Meter)	Numeric	S DI=0.002
DP=	NI	Depth (m; Meter)	Numeric	S DP=2E4:9E5
EF=	NI	Efficiency (Percent)	Numeric	S EF=60
EL=	NI	Electrical Conductivity (S/m; Siemen per Meter)	Numeric	S EL=7.0E4
EN=	NI	Energy (J; Joule)	Numeric	S EN=0.5
ER=	NI	Electrical Resistivity (ohmm; Ohm meter)	Numeric	S ER=1.7E-4
EV=	NI	Electron Volt Energy (eV; Electron Volt)	Numeric	S EV=0.5:0
FR=	NI	Frequency (Hz; Hertz)	Numeric	S FR=0:1

....

MD=	NI	Magnetic Flux Density (T; Tesla)	Numeric	S MD=1E-2
MS=	NI	Memory Size (Byte)	Numeric	S MS>=3E7
NF=	NI	Noise Figure (dB; Decibel)	Numeric	S NF=1.2
PO=	PO	Power (w; Watt)	Numeric	S PO=4E-5:2E-4
PR=	NI	Pressure (Pa; Pascal)	Numeric	S PR=1.3E-3
PS=	NI	Printer Speed (cps; Characters per Second)	Numeric	S PS>=2E2
PX=	NI	Picture Size (pixel; Picture Element)	Numeric	S PX=512
RA=	NI	Radiation Absorbed Dose (GY; Gray)	Numeric	S PX=512
RD=	NI	Radiation Dose Equivalent (Sv; Sievert)	Numeric	S RA=2

....

VO=	NI	Voltage (V; Volt)	Numeric	S VO>=1000
WA=	NI	Wavelength (m; Meter)	Numeric	S WA=8.8E-7:1E-1
WL=	NI	Word Length (Bit)	Numeric	S WL=32

--Excerpt from the Numeric Index of the INSPEC Bluesheet

Equivalent Methods of SELECTing Numbers

Numeric indexing can look different, depending on the data: numeric data can look like numbers, floating point data, exponential data, or use special characters, such as K for thousand or B for billion. There can be several different, yet equivalent, ways of entering the same number in a SELECT command.

Technique	Example
Enter numbers with or without commas.	<p>For example, to select a picture size of 1,280 pixels you could enter:</p> <p style="text-align: center;">select px=1,280 OR select px=1280</p>
Ignore leading and trailing zeroes.	<p>For example, 0.0280 is the same as .028 when searching online.</p>
Change scientific notation to exponential notation.	<p>For example, to search on a bit rate of 64x10(3)—10 to the 3rd—you would enter:</p> <p style="text-align: center;">select bi=64e3</p> <ul style="list-style-type: none"> • for very small numbers, include the negative sign in the exponent: <p style="text-align: center;">select re=1.7e-4 (for an electrical resistivity of 0.00017 Ohms)</p> • for very large numbers the plus sign is optional, but, if present, you must place quotation marks around the data: <p style="text-align: center;">select ag=1e9 or s ag="1e+9" (for an age of 1 billion years)</p>
Enter special characters as given.	<p>For example, 5km or 5 kilometers can be selected using DI=5k. You could also enter any of the variations below:</p> <p style="text-align: center;">s di=5k s di=5,000 s di=5000 s di=5e3 s di="5e+3"</p>
Use the EXPAND command.	<p>(E NI=TEMPERATURE) to display the numerical index thesaurus and view related terms (RT) to identify conversion formulae for the units you are working with.</p>

Table 3-2: Searching with Numbers

Following is an example of EXPANDING into the numeric index thesaurus of *INSPEC*.

File 2:INSPEC 1969-2000/Oct W4
(c) 2000 Institution of Electrical Engineers

Set Items Description
--- -----

?e ni=temperature

Ref	Items	RT	Index-term
E1	504		NI=SV (See NI=RADIATION DOSE EQUIVALENT; use RD=)
E2	14809		NI=T (See NI=MAGNETIC FLUX DENSITY; use MD=)
E3	244740	2	*NI=TEMPERATURE (In kelvin (K); use TE=)
E4	0		NI=TESLA (See NI=MAGNETIC FLUX DENSITY; use MD=)
E5	0		NI=THICKNESS (See NI=SIZE; use SI=)
E6	69902	5	NI=TIME (In seconds (s); use TM=)
E7	0		NI=TON (See NI=MASS; in kilograms (kg); use MA=)
E8	0		NI=TONNE (See NI=MASS; in kilograms (kg); use MA=)
E9	0		NI=TORR (See NI=PRESSURE; in pascals (Pa); use PR=)
E10	0		NI=TRANSMISSION SPEED (See NI=BIT RATE; use BI=)
E11	3743		NI=V (See NI=VOLTAGE; use VO=)
E12	2247		NI=VA (See NI=APPARENT POWER; use AP=)

Enter P or PAGE for more

?e e3

Ref	Items	Type	RT	Index-term
R1	244740		2	*NI=TEMPERATURE (In kelvin (K); use TE=)
R2	0	S		K = degC + 273.15
R3	0	S		K = degF + 459.67 * 0.5555556

Topic: You need information on free electron lasers or FEL or AFEL, and their waveguides having an ion beam of 1 million electron volts or more. A search of *Dialog Bluesheets* (File 415) has already identified *INSPEC* (File 2) as having a numerically indexed field specifically for electron voltage data.

File 2:INSPEC 1969-2000/Oct W4
(c) 2000 Institution of Electrical Engineers

Set Items Description
--- -----

?s (afel or fel or laser?) and waveguide?

21 AFEL
3752 FEL
305505 LASER?
70560 WAVEGUIDE?
S1 11003 (AFEL OR FEL OR LASER?) AND WAVEGUIDE?

?s s1 and ev=>1m

>>>File 2 processing for EV=1M : EV=1.0E75
>>> started at EV= 1.000000E+06 stopped at EV= 6.000000E+16
11003 S1
17098 EV=>1M
S2 64 S1 AND EV=>1M

?s s2/1999:2000

64 S2
485795 PY=1999 : PY=2000
S3 6 S2/1999:2000

?t 3/9/1

3/9/1

DIALOG(R)File 2:INSPEC
(c) 2000 Institution of Electrical Engineers. All rts. reserv.

6678205 INSPEC Abstract Number: A2000-18-5275-007, B2000-09-5210H-003

Title: Recent progress on laser acceleration research
Author(s): Nakjima, K.; Dewa, H.; Hosokai, T.; Kanazawa, S.; Kando, M.; Kondoh, S.; Kotaki, H.
Author Affiliation: JAERI, Kyoto, Japan
Conference Title: Proceedings of the First Symposium on Advanced Photon Research (JAERI-Conf 2000-006) p.59-62
Publisher: Japan Atomic Energy Res. Inst, Ibaraki-ken, Japan
Publication Date: 2000 Country of Publication: Japan xix+339 pp.
Material Identity Number: XX-2000-01542
Conference Title: Proceedings of the First Symposium on Advanced Photon Research
Conference Date: 8-9 Nov. 1999 Conference Location: Kyoto, Japan
Language: English Document Type: Conference Paper (PA)
Treatment: Practical (P); Experimental (X)
Abstract: Recently there has been a tremendous experimental progress in ultrahigh field particle acceleration driven by ultraintense laser pulses in plasmas. A design of the laser wakefield accelerators aiming at GeV energy gains is discussed by presenting our recent progress on the laser wakefield acceleration experiments, the developments of high quality electron beam injectors and the capillary plasma waveguide for optical guiding of ultrashort intense laser pulses. (6 Refs)

Descriptors: beam handling equipment; electron accelerators; electron guns; plasma devices; plasma filled waveguides ; plasma light propagation; plasma transport processes; wakefield accelerators; Z pinch

Identifiers: laser acceleration research; experimental progress; ultrahigh field particle acceleration; ultraintense laser pulses; plasmas; design; laser wakefield accelerators; GeV energy gains; laser wakefield acceleration experiments; high quality electron beam injectors; capillary plasma waveguide ; optical guiding; ultrashort intense laser pulses; 300 MeV

Class Codes: A5275D (Accelerators and propulsion using plasma); A2915D (Linear accelerators); A5225F (Plasma transport properties); A5240D (Electromagnetic wave propagation in plasma); A5240F (Antennas in plasma; plasma-filled wave guides); A0777 (Particle beam production and handling; targets); A2921 (Beams in particle accelerators); A2925F (Beam handling, focusing, pulsing, stripping and diagnostics); A5255E (Pinch effect and pinch machines); B5210H (Electromagnetic wave propagation in plasma); B7410B (Particle beam handling and diagnostics)

Numerical Indexing: electron volt energy 3.0E+08 eV

Copyright 2000, IEE

Practice Exercise:

For this exercise assume you will be searching the numerically indexed fields in INSPEC (File 2). Refer to the Bluesheet excerpts on page 3-5 and other resources provided in this section to create SELECT statements for the following topics.

3. Find 30 to 60 Terabytes per second.
4. Find a current less than 0.10 Amps
5. Find a frequency between 600MHz and 660MHz, inclusive
6. Find records with a wavelength of between 490nm and 560nm (the wavelength of green light)

Application 2: Working with Images

Dialog files that contain images include *Derwent World Patents Index* (File 351), and a number of Trademarkscan databases, including *Trademarkscan - U.S. Federal* (File 226), *Trademarkscan - Canada* (File 127), *Trademarkscan - International Register* (File 671) and *Trademarkscan - European Community* (File 227). In Derwent the image will be the drawing that is most representative of the invention. Trademarkscan images are available for trademarks that include designs (searchable with the **/design** limit).

Displaying Images. Format codes vary in the databases that provide images, and you should check the database Bluesheet or type HELP FMT <database number> to determine which formats include the image. In most cases including the display code IM in your TYPE command (e.g. T s1/6,im/1-3) will also retrieve an image.

Saving Images. How you save an image to use in other documents depends on the Dialog interface you use to conduct your search. Both Dialoglink and DialogWeb allow for the display of images, but the images are saved as different types of files.

In Dialoglink images are automatically saved as bitmap files (.bmp). To use the image in a WORD document, highlight and save the record from the retrieve buffer of Dialoglink. Then use the INSERT feature of WORD to insert the bitmap file that contains the image.

Topic: Find an image of the trademark for “Corgi”.

```

File 226:TRADEMARKSCAN(R)-US FED  OG001017/AP000926
(c) 2000 Thomson & Thomson

Set  Items  Description
---  -
?e tr=corgi?

Ref  Items  Index-term
E1   4      TR=CORGENTECH@
E2   1      TR=CORGHI@
E3   0      *TR=CORGI?
E4   7      TR=CORGI@
E5   1      TR=CORGLAES@
E6   1      TR=CORGLAZE@DE
E7   1      TR=CORGLOBE@
E8   1      TR=CORGNE@LE
E9   1      TR=CORGRAM@
E10  1      TR=CORGRATE@
E11  1      TR=CORGRID@DE
E12  1      TR=CORGRIP@

Enter P or PAGE for more

?s e4/design

S1   2      TR="CORGI@"/DESIGN

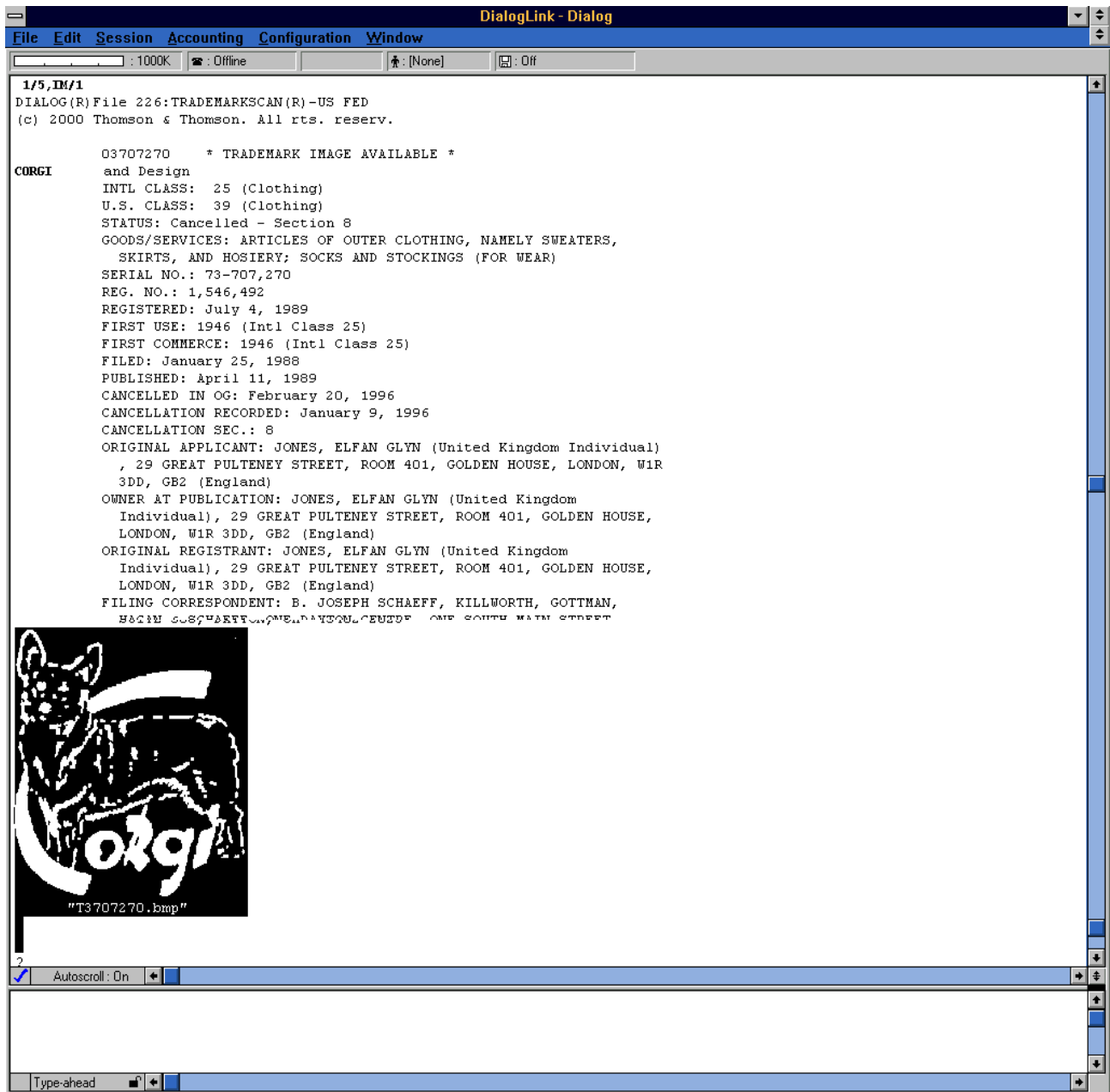
?t 1/5,im/1

```

Expand into the term-rotated index of Trademarkscan to look for “corgi” as part of a trademark.

Limit your retrieval to those records that contain designs.

Include the display code for the image along with a predefined format option.



Click and drag to highlight the image (or the whole record if you like). Then choose FILE, SAVE COPY AS. Save the file with a .bmp extension, then use the INSERT, PICTURE, FROM FILE options in WORD to insert the image where you want it to go.



Note: When working in DialogWeb, images will be saved as .GIF files. Right click on the image and select SAVE IMAGE AS... from your browser's options. You should be able to insert the GIF file in any Microsoft application.

Application 3: Duplicate Detection in Patent Files

Each patent database on Dialog offers a unique perspective and presents patent data differently, but many of the databases overlap in their coverage. Most patent searchers use the Dialog OneSearch® feature to search several of these databases at the same time. When duplicates appear, it may be desirable to compare, rather than remove them, to avoid missing important details.

Identification of duplicate patents (IDPAT) is critical to managing overlapping patent data. The IDPAT command organizes a set of patent records into family-related groups of records and identifies unique and duplicate records. Priority application numbers and patent numbers are used to identify duplicate patents. With IDPAT, you no longer have to sift manually through patent records from different databases. With this automatic grouping, you can easily choose to display records based on your needs.

BEGIN desired patent databases and enter search strategy.

 Note: File 399, CA Search, a database of chemical literature, also includes patent data, along with journal articles, conference papers, etc.

```

?b patents,399

      Set  Items  Description
      ---  -
?s (artificial or synthetic)(w)blood and gelatin

          266162  ARTIFICIAL
          1787953  SYNTHETIC
          1022449  BLOOD
              4892  (ARTIFICIAL OR SYNTHETIC)(W)BLOOD
          173029  GELATIN
          S1      371  (ARTIFICIAL OR SYNTHETIC)(W)BLOOD AND GELATIN

?s s1 and py=1999:2000
Processing
Processed 10 of 18 files ...
Completed processing all files
          371  S1
          8114549  PY=1999 : PY=2000
          S2      69  S1 AND PY=1999:2000
  
```

Enter IDPAT to group patents and identify duplicates.

```

?idpat
New file order will be: 345,344,351,352,342,348
Duplicates will be matched against primary file: 345
Press ENTER to accept or enter preferred primary file number.
?<ENTER>

New file order: 345, 344, 351, 352, 342, 348, 123, 340, 347, 349,
353, 371, 447, 652, 653, 654, 670, 399
  
```

Patent record grouping works best when the file against which duplicate patents are matched contains the largest number of patent countries. Records from this file are labeled as Primary Records in the patent group table. To guarantee that the Primary Records are from the largest multiple patent country file, IDPAT reorders the OneSearch file order of your BEGIN command so that the file containing the largest number of countries will be sorted first

```

...examined 50 records (50)
...completed examining records
  S3      69 IDPAT (sorted in duplicate/non-duplicate order)
    
```

```

Summary:
S3 has 69 records ordered as follows:
  11 patent groups (records 1-29)
  40 patent records without duplicates (records 30-69)
    
```

Group Table:

Groups	Total in Group	Primary Records	Record Numbers	Duplicates	Record Numbers
G1	2	F351	1	F352	2
G2	2	F351	3	F352	4
G3	2	F351	5	F352	6
G4	3	F351	7	F352	8
					F348 9
G5	2	F348	10		
		F654	11		
G6	8	F348	12		
		F654	13-19		
G7	2	F348	20		
		F654	21		
G8	2	F348	22		
		F654	23		
G9	2	F340	24	F654	25
G10	2	F654	26-27		
G11	2	F654	28-29		

The patent group table identifies each unique group by a G number, and indicates the number of records in each group, the file and record number(s) for primary records, and the file(s) and record number(s) for duplicate records.

Option 5 allows you to TYPE or PRINT from an additional set that only contains primary and non-duplicate records.

1. Show Group Table
2. Show Summary
3. Quit
4. TYPE or PRINT Selected Records
5. TYPE or PRINT Primary and Non-Duplicate Records

```

Enter an option (e.g., 4).
?5
    
```

```

      S4      63 IDPAT (primary/non-duplicate records only)
Press ENTER to TYPE records or enter PR to PRINT records via e-
mail, fax, or postal delivery.
    
```

The alternate address must be created before using IDPAT. Enter EDIT ADDRESS <method> while in the command mode to create an alternate address (email, fax, postal).

```

?pr
Enter format number or two-character display tag(s) (e.g., TI, PA)
or enter Q to return to command mode.
    
```

```

?3
Enter record(s) to be PRINTed (e.g., ALL or a range to receive a
desired number of Primary/Non-duplicate records, e.g., 1-10), or
enter Q to return to command mode.
    
```

```

?all
Enter alternate address name or press ENTER for default address.
    
```

```

?adpat
    
```

Address "ADPAT" is used for E-Mail (Internet) delivery:

```

Internet address  PATRICIA_CURRIE@DIALOG.COM
    
```

Do you want to use this address?

Y = Yes N = No

```

?y
    
```

P025: PRINT 4/3/1-69 ADDR ADPAT (items 1-63 VIA EMAIL) est. cost of \$81.56
Alternate address: ADPAT is used.

Internet email delivery charges will also be added to your invoice at the rate of \$0.50 per PRINT command.

The IDPAT sets are available for further use once you return to command mode.

*** NOTE: Unless you are setting up an Alert, you may enter SEND or SEND ALL to process your PRINT request(s) now, rather than waiting 30 minutes for processing. For more information, enter HELP SEND.

?ds

Set	Items	Description
S1	371	(ARTIFICIAL OR SYNTHETIC)()BLOOD AND GELATIN
S2	69	S1 AND PY=1999:2000
S3	69	IDPAT (sorted in duplicate/non-duplicate order)
S4	63	IDPAT (primary/non-duplicate records only)

Application 4: Select Steps in Trademark Files

SELECT STEPS produces individual sets for each term and each proximity operator in your SELECT statement. Since SELECT STEPS produces individual sets that can be used in place of the terms they represent, it allows maximum flexibility in searching.

While SELECT STEPS works in all Dialog databases, it is particularly useful when doing searches for combinations of terms that may make up part of a trademark. Trademark searching is unique to Dialog database searching in that specific keywords as opposed to concepts are used when building a search strategy. The creation of separate sets for each search term lets you mix and match sets in a wide variety of ways, giving you the ultimate in search flexibility.

TOPIC: Common law trademarks are generally brand names that are used to identify goods or services, the names of which are not, or never have been, registered at the State or Federal level. A brand name that is lacking a registration but continuously used in association with certain goods or services is protectable and the owner's rights thereto must be acknowledged.

Conduct a common law trademark search for the mark "Ounces of Bounces," which is intended to be used for toys such as balls, dolls, and games. A combination of business and news files is a good place to start.

<p>For more instruction on creating aliases (and storing them permanently) see "Customizing Your Dialog Experience." Use a free file, like 410, to create the alias.</p>	<pre>File 410:Chronolog(R) 1981-2000 Sep/Oct (c) 2000 The Dialog Corporation Set Items Description --- ---- - ?set alias The SET ALIAS command is used to establish your own aliases for DIALOG commands, operators, or search terms. You will be prompted first for the alias, then for the original text. 1-- Enter the alias you wish to set; it must be a single word and can be up to 15 characters in length:</pre>
<p>Name your alias.</p>	<pre>?general 2-- Enter the DIALOG command, operator, or text that you wish to have the alias replace:</pre>
<p>Enter the file numbers you wish to include in your OneSearch alias. The alias will remain in effect until you logoff.</p>	<pre>?9,13,88,275,149,47,111,211,148,93 GENERAL is set ON as an alias for 9,13,88,275,149,47,111,211,148,93. ?b general SYSTEM:OS - DIALOG OneSearch File 9:Business & Industry(R) Jul/1994-2000/Dec 21 (c) 2000 Resp. DB Svcs. File 13:BAMP 2000/Dec W2 (c) 2000 Resp. DB Svcs. . . .</pre>

```
File 211:Gale Group Newsearch(TM) 2000/Dec 22
(c) 2000 The Gale Group
File 148:Gale Group Trade & Industry DB 1976-2000/Dec 22
(c)2000 The Gale Group
File 93:TableBase(R) Sep 1997-2000/Dec W2
(c) 2000 Resp. DB Svcs.
```

We have "ounce?" in the tradename and "bounce?" in the tradename, but the two don't appear to show up together.

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

→ **?ss (ounce? and bounce?)/tn**

```
S1 2 OUNCE?/TN
S2 62 BOUNCE?/TN
S3 0 (OUNCE? AND BOUNCE?)/TN
```

Fortunately, we used the SS command, so now we can mix and match the sets that DID have hits with other important search concepts.

→ **?s s1 and (toy? ? or game? or doll? ? or ball?)**

```
2 S1
178492 TOY? ?
698748 GAME?
47024 DOLL? ?
473234 BALL?
S4 0 S1 AND (TOY? ? OR GAME? OR DOLL? ? OR BALL?)
```

Use limited truncation (e.g., toy? ?) to retrieve only one additional character.

→ **?s s2 and (toy? ? or game? or doll? ? or ball?)**

```
62 S2
178492 TOY? ?
698748 GAME?
47024 DOLL? ?
473234 BALL?
S5 28 S2 AND (TOY? ? OR GAME? OR DOLL? ? OR BALL?)
```

HINT: If using Dialoglink®, rather than retyping the entire line click on SESSION and scroll to RECALL LAST LINE. Similarly, you can use the PREVIOUS COMMAND button in Dialog@Web to modify and reuse the search string.

```
?rd
...completed examining records
S6 17 RD (unique items)
```

?t 6/8/all

```
6/8/1 (Item 1 from file: 9)
DIALOG(R)File 9:(c) 2000 Resp. DB Svcs. All rts. reserv.
```

```
02949604 (USE FORMAT 7 OR 9 FOR FULLTEXT)
Laundry aids marketplace: Battling for consumers
September 2000
WORD COUNT: 1898
```

```
COMPANY NAMES: BENCKISER (JOH A) GMBH (BENCKISER HOLDING GMBH);
CLOROX CO; DIAL CORP (THE); PROCTER & GAMBLE CO; RECKITT BENCKISER
INDUSTRY NAMES: Household cleaners
PRODUCT NAMES: Household chlorine bleach (284250); Household
laundry aids except detergents and presoaks (284260); Household
non-chlorine bleach (284265)
CONCEPT TERMS: All market information; All product and service
information; Market share; Market size; Product introduction;
Sales
BRAND NAMES: Clorox; Biz; Calgon; 20-Mule Team Borax; Downy;
Bounce ; Shout
```

```
.
.
.
```

6/8/2 (Item 2 from file: 9)
DIALOG(R)File 9:(c) 2000 Resp. DB Svcs. All rts. reserv.

02166256 (USE FORMAT 7 OR 9 FOR FULLTEXT)
Just Juice Toybox 100% Pure Juice with Hi-Bounce Powerball -
Apple; Orange
June 15, 1998
WORD COUNT: 92

COMPANY NAMES: JUST JUICE CO
INDUSTRY NAMES: Beverage; Food; Nonalcoholic beverages
PRODUCT NAMES: Fresh and canned fruit juices, nectars and
concentrates (203381)
CONCEPT TERMS: All product and service information; Product
introduction
BRAND NAMES: Just Juice Toybox 100% Pure Juice with Hi-**Bounce**
Powerball
GEOGRAPHIC NAMES: European Union (EUCX); United Kingdom (UNK);
Western Europe (WEEX)

6/8/3 (Item 1 from file: 88)
DIALOG(R)File 88:(c) 2000 The Gale Group. All rts. reserv.

02680238 SUPPLIER NUMBER: 11771456 (USE FORMAT 7 OR 9 FOR
FULL TEXT)
Woolly **Bounce**. (Software Review) (science educational software for
K-2 students) (Evaluation)
Nov-Dec, 1991
WORD COUNT: 740 LINE COUNT: 00060

COMPANY NAMES: Minnesota Educational Computing Corp.--Products
SIC CODES: 7372 Prepackaged software
TRADE NAMES: Woolly Bounce (Educational software)--evaluation
FILE SEGMENT: CD File 275

6/8/4 (Item 2 from file: 88)
DIALOG(R)File 88:(c) 2000 The Gale Group. All rts. reserv.

01594587 SUPPLIER NUMBER: 00528915
The Future of Electronic Games.
Feb., 1984

TRADE NAMES: **Bouncer**
SPECIAL FEATURES: illustration; -Other
FILE SEGMENT: AI File 88

6/8/5 (Item 3 from file: 88)
DIALOG(R)File 88:(c) 2000 The Gale Group. All rts. reserv.

01499492 SUPPLIER NUMBER: 00520129
News & Products.
May, 1983

TRADE NAMES: Crazy Painter; **Bounceoids** ; Avenger; Ramax; Voice
Box II; Roadsearch; Wordcraft 20 (word processing software);
Fortune Hunter; AntEater; Princess and Frog; Typo; Speak Up
FILE SEGMENT: AI File 88

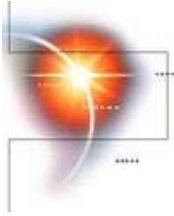
6/8/6 (Item 1 from file: 275)
DIALOG(R)File 275:(c) 2000 The Gale Group. All rts. reserv.

01308263 SUPPLIER NUMBER: 07651662 (USE FORMAT 7 OR 9 FOR FULL
TEXT)
Three programs that cover a gamut of activities. (Software Review)
(Sunburst Communications' **Bounce**, Exam in a Can from ips
Publishing,
. . .

Online Practice

Practice some of the techniques that you learned in this section by completing the following exercises. Check your answers in Appendix B.

1. Use the PATENTS OneSearch category to conduct a search for patents on robotic surgical devices held by Symbiosis Corp. Use IDPAT to identify duplicate records, then examine records identified as primary or non-duplicate.
2. Use the PATENTS OneSearch category to conduct a search for patents on robotic surgical devices held by Symbiosis Corp. Use IDPAT to identify duplicate records, then examine records identified as primary or non-duplicate.



Section 4: Customizing Your Dialog Experience

In this section you will learn to:

- Create your own customized OneSearch categories
- Customize output formats
- Set up and modify a user profile
- Use special Dialog commands such as KEEP and SET

Dialog offers many options for customizing your search experience such as:

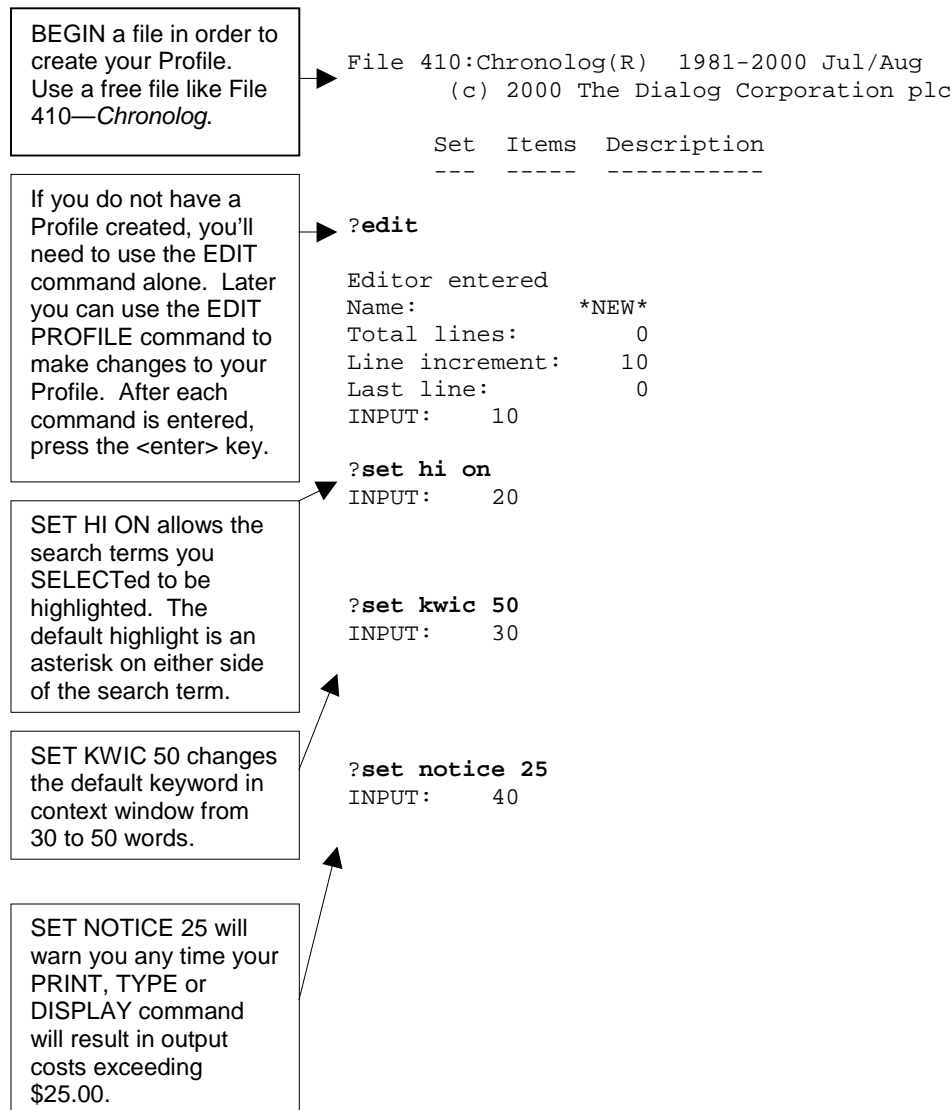
- Renaming Dialog commands to something more meaningful to you
- Creating and storing your own OneSearch categories
- Customizing output formats
- KEEPing specific records in a “shopping cart” set

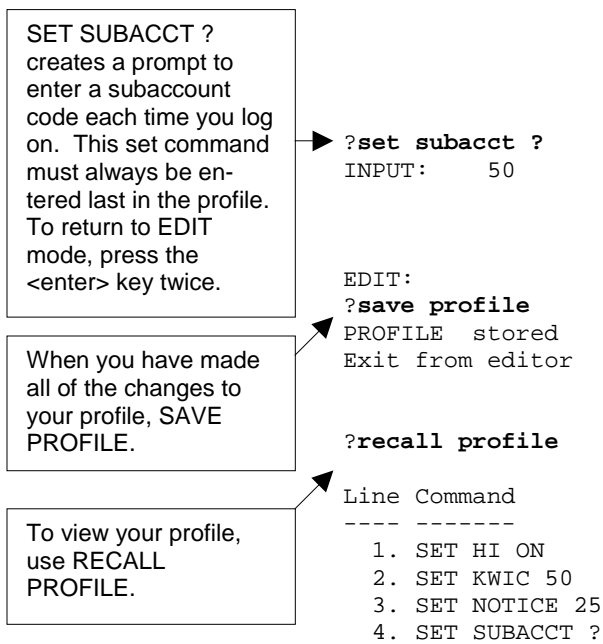
Some of these options have already been described in *Developing Dialog Searching Expertise Part 3: Advanced*. In this section, you will learn how to store your most frequently used SET commands in your user profile and how to utilize the KEEP command to create a customized set of final search results, from which you can TYPE, PRINT or place an ORDER to a document delivery supplier.

Application 1: Setting Up and Modifying a User Profile

Each Dialog password has a number of default settings, such as the figure used for highlighting or the size of the KWIC window. These default settings are considered your user profile. You can change these settings by using the SET command; if you want these changes to be permanent, you can edit your online profile to customize your account. By storing SET commands in your user profile, the SET activities will automatically be invoked whenever you log on to Dialog. For instance, storing the SET SUBACCOUNT command in your profile will create an automatic prompt for you to enter a subaccount code as soon as you connect to Dialog. (Including a subaccount number with the SET command will always charge your search session to that number, unless you change it after logging on by entering a new SET SUBACCOUNT command.) Setting the highlight feature on (SET HI ON) will cause your output to always display with asterisks surrounding your search terms (unless you've chosen a different symbol for your highlight).

In order to set up your user profile you will need to use Dialog's online editor.

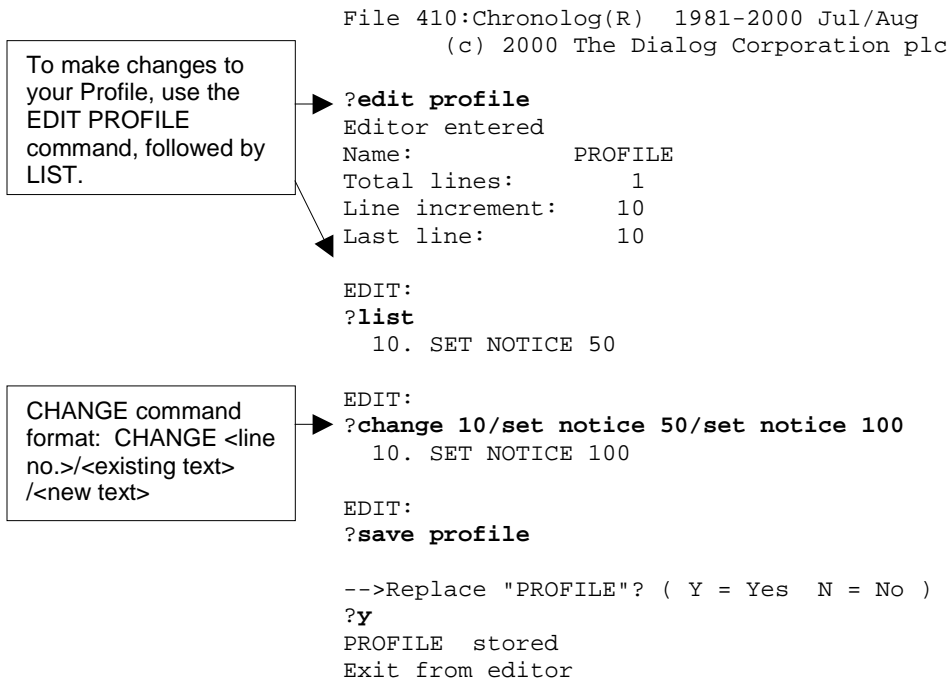




The online editor also allows you to modify your User Profile. Among the EDIT commands available to you for modifying your profile are LIST, CHANGE, DELETE, INSERT.

Note: A list of all SET commands are available in Appendix A.

Topic: You've previously stored a SET NOTICE command in your profile with the amount set at \$50.00. Now you'd like to CHANGE the SET NOTICE amount to \$100.00.



Topic: Change your profile to eliminate the KWIC, HIGHLIGHT and SET SUBACCOUNT options you had previously stored.

```
Set  Items  Description
---  -
?edit profile

Editor entered
Name:          PROFILE
Total lines:   4
Line increment: 10
Last line:     40

EDIT:
?list
  10. SET HI ON
  20. SET KWIC 50
  30. SET NOTICE 25
  40. SET SUBACCT ?

EDIT:
?delete 20,30,40

EDIT:

?save profile
-->Replace "PROFILE"? ( Y = Yes  N = No )

?y

PROFILE stored
Exit from editor

?logoff
```

Here we use the DELETE option to take out the KWIC, SET NOTICE and SET SUBACCT options.



Application 2: Creating a Customized Set Using the KEEP command

The KEEP command is used to place selected records into an auxiliary set, numbered S0 (set zero). You can KEEP chosen records from various sets within your search, to create a customized set of final search results.

The format of the KEEP command is KEEP (or K) followed by:

- a set number (Sn), or
- a set number and selected item numbers, or
- a Dialog accession number

You must be connected to the database in which the records are stored in order to place those records in set S0. KEEP can also be used in a OneSearch.

You can TYPE, DISPLAY, or PRINT set S0, as well as SORT it, and you can use it in subsequent SELECT commands in the search strategy, combining it with other terms or applying field or limit suffix codes to it. However, set S0 cannot be used in a SearchSave strategy since the KEEP command cannot be SAVED; therefore set S0 cannot be recreated when the SearchSave is executed.

KEEP can be used to prepare a DIALORDER request. When you enter the ORDER <Acronym> command, DIALORDER looks for a set S0 and places the records it finds in the DIALORDER request. Set S0 is deleted once the order has been placed.

Topic: Find articles on the use of neural network technology to combat credit card fraud. Use the KEEP command to create a set of final results from a OneSearch.

SET FILES for the
Business Economics
OneSearch category.

```
DIALINDEX(R)
(c) 2000 The Dialog Corporation plc
```

```
*** DIALINDEX search results display in an abbreviated ***
*** format unless you enter the SET DETAIL ON command. ***
```

```
?sf busecon
You have 27 files in your file list.
(To see banners, use SHOW FILES command)
```

```
?s neural()network?(3n)credit()card?(s)fraud?
```

```
Your SELECT statement is:
```

```
s neural()network?(3n)credit()card?(s)fraud?
```

Items	File
13	9: Business & Industry(R)_Jul/1994-2000/Oct 26
4	13: BAMP_2000/Oct W3
12	15: ABI/Inform(R)_1971-2000/Oct 27
22	16: Gale Group PROMT(R)_1990-2000/Oct 27
10	20: World Reporter_1997-2000/Oct 27
2	75: TGG Management Contents(R)_86-2000/Oct W3
30	148: Gale Group Trade & Industry DB_1976-2000/Oct27
4	484: Periodical Abstracts Plustext_1986-2000/Oct W4

```

5 485: Accounting and Tax Database_1971-2000/ Oct W4
8 553: Wilson Bus. Abs. FullText_1982-2000/Sep
1 583: Gale Group Globalbase(TM)_1986-2000/Oct 25
18 636: Gale Group Newsletter DB(TM)_1987-2000/ Oct 27

```

12 files have one or more items; file list includes 27 files.

```

?save temp
Temp SearchSave "TD591" stored

```

BEGIN the databases that contain records and add CURRENT to retrieve the current year plus one year back.

```

?b hits current
SYSTEM:OS - DIALOG OneSearch
File 9:Business & Industry(R) Jul/1994-2000/Oct 26
(c) 2000 Resp. DB Svcs.
.
.
File 583:Gale Group Globalbase(TM) 1986-2000/Oct 25
(c) 2000 The Gale Group
File 636:Gale Group Newsletter DB(TM) 1987-2000/Oct 27
(c) 2000 The Gale Group
>>>CURRENT started

```

```

Set Items Description
--- -----

```

```

?exs
Executing TD591
>>>SET HILIGHT: use ON, OFF, or 1-5 characters
9633 NEURAL
1682596 NETWORK?
695259 CREDIT
646710 CARD?
120590 FRAUD?
S1 20 NEURAL()NETWORK?(3N)CREDIT()CARD?(S)FRAUD?

```

Begin by browsing your output with a free format.

```

?rd
...completed examining records
S2 12 RD (unique items)

```

```

?t 2/8/1-6
2/8/1 (Item 1 from file: 9)
02412951
Store Cards Enlist Neural Networks in Fight Against Credit Fraud
March 1999

```

```

2/8/2 (Item 1 from file: 13)
DIALOG(R)File 13:(c) 2000 Resp. DB Svcs. All rts. reserv.

```

```

01175320 02538215 (USE FORMAT 7 OR 9 FOR FULLTEXT)
How Top E-Commerce Fraud Detection Software Stacks Up
August 2000
WORD COUNT: 1335

```

```

COMPANY DEPARTMENT NAME: Information Technology; Operations
INDUSTRY NAMES: Applications software; Software
PRODUCT NAMES: Applications software packages NEC (737279)

```

```

CONCEPT TERMS: Information Technology; Operations; Electronic
commerce; Fraud; Security; Technology evaluation

```

GEOGRAPHIC NAMES: United States (USA)

2/8/3 (Item 1 from file: 15)
 DIALOG(R)File 15:(c) 2000 Bell & Howell. All rts. reserv.

02041214 55527478

USE FORMAT 9 FOR FULL TEXT

Credit & debit cards: Can community banks compete?

WORD COUNT: 2348 LENGTH: 5 Pages

Jun 2000

GEOGRAPHIC NAMES: United States; US

DESCRIPTORS: Community banks; Bank credit cards; Customer services; Profitability; Electronic commerce
 CLASSIFICATION CODES: 9190 (CN=United States); 8120 (CN=Retail banking); 5250 (CN=Telecommunications systems & Internet communications)
 PRINT MEDIA ID: 11302

2/8/4 (Item 2 from file: 15)
 DIALOG(R)File 15:(c) 2000 Bell & Howell. All rts. reserv.

01857794 05-08786

USE FORMAT 9 FOR FULL TEXT

Fuzzy systems and neuro-computing in credit approval

WORD COUNT: 1976 LENGTH: 4 Pages

Jul/Aug 1999

GEOGRAPHIC NAMES: US

DESCRIPTORS: Banking industry; Fuzzy logic; Artificial intelligence; Neural networks; Loan approval procedures
 CLASSIFICATION CODES: 5240 (CN=Software & systems); 8120 (CN=Retail banking); 3200 (CN=Credit management); 9190 (CN=United States)

2/8/5 (Item 1 from file: 16)
 07850586 Supplier Number: 65009121 (USE FORMAT 7 FOR FULLTEXT)
 latin america: Brazilian Bank Takes Aim At Launderers: Banco Itau turns to neural networking technology to detect money laundering.(Company Business and Marketing)
 Sept, 2000
 Word Count: 1061

2/8/6 (Item 2 from file: 16)
 06594951 Supplier Number: 55580958 (USE FORMAT 7 FOR FULLTEXT)
 EDS staff give Halifax extra help.(Electronic Data Systems)
 (Company Business and Marketing)
 August 19, 1999
 Word Count: 190

Use the KEEP command to create a set of those records that are of interest to you.

→ ?k 2/1,4
 S0 2 2/1,4

?t 2/8/7-12

2/8/7 (Item 3 from file: 16)
06063824 Supplier Number: 53509598 (USE FORMAT 7 FOR FULLTEXT)
Today's News.
Jan 4, 1999
Word Count: 346

2/8/8 (Item 4 from file: 16)
06063822 Supplier Number: 53509596 (USE FORMAT 7 FOR FULLTEXT)
Fraud Software Maker Feeling Pinch.
Jan 4, 1999
Word Count: 541

2/8/9 (Item 1 from file: 20)
DIALOG(R)File 20:(c) 2000 The Dialog Corporation plc. All rts.
reserv.

04637071 (USE FORMAT 7 OR 9 FOR FULLTEXT)
Credit Saison Selects Falcon From HNC Financial Solutions;
Credit Card Customers to Get Fraud Protection
March 15, 1999
WORD COUNT: 400

COUNTRY NAMES/CODES: Japan (JP)
REGIONS: Asia; Far East; Pacific Rim
SIC CODES/DESCRIPTIONS: 6000 (Depository Institutions)

2/8/10 (Item 2 from file: 20)
DIALOG(R)File 20:(c) 2000 The Dialog Corporation plc. All rts.
reserv.

04323857 (USE FORMAT 7 OR 9 FOR FULLTEXT)
Fraud Software Maker Feeling Pinch
SECTION TITLE: Technology
January 04, 1999
WORD COUNT: 524

COMPANY NAMES: Nestor Inc
DESCRIPTORS: Equities; Market News; Interim Results; Results;
Company News
COUNTRY NAMES/CODES: United States of America (US)
REGIONS: Americas; North America; Pacific Rim
SIC CODES/DESCRIPTIONS: 7372 (Prepackaged Software)

2/8/11 (Item 1 from file: 148)
DIALOG(R)File 148:(c)2000 The Gale Group. All rts. reserv.

10909477 SUPPLIER NUMBER: 54238570
Store cards enlist neural networks in fight against credit fraud.
March, 1999

SPECIAL FEATURES: illustration; Other
COMPANY NAMES: Sears, Roebuck and Co.--Safety and security
measures
INDUSTRY CODES/NAMES: BUSN Any type of business; RETL
Retailing
DESCRIPTORS: Retail industry--Safety and security measures;
Credit card fraud--Prevention; Neural networks--Usage
GEOGRAPHIC CODES/NAMES: 1USA United States
PRODUCT/INDUSTRY NAMES: 5311000 (Department Stores); 3573006
(Artificial Intelligence Systems)

EVENT CODES/NAMES: 366 Services introduction;440 Facilities & equipment
 SIC CODES: 5311 Department stores; 3571 Electronic computers
 NAICS CODES: 45211 Department Stores; 334111 Electronic Computer Manufacturing
 TICKER SYMBOLS: S
 FILE SEGMENT: TI File 148

2/8/12 (Item 2 from file: 148)
 DIALOG(R)File 148:(c)2000 The Gale Group. All rts. reserv.

10882862 SUPPLIER NUMBER: 54115844 (USE FORMAT 7 OR 9 FOR FULL TEXT)

A learning process.(includes related article on portals)(banks' use of neural networks)

Jan, 1999

WORD COUNT: 1619 LINE COUNT: 00133

SPECIAL FEATURES: illustration; 0
 INDUSTRY CODES/NAMES: BANK Banking, Finance and Accounting;
 BUSN Any type of business

DESCRIPTORS: Banking industry--Data processing; Artificial intelligence--Usage; Neural networks--Usage

PRODUCT/INDUSTRY NAMES: 6010000 (Banking Institutions)

SIC CODES: 6000 DEPOSITORY INSTITUTIONS

NAICS CODES: 5221 Depository Credit Intermediation

FILE SEGMENT: TI File 148

As you add records to Set SO, the record count of your set increases.

?k 2/12

S0 3 2/12

Once you have a final set of relevant records, you can use TYPE, PRINT or DISPLAY to retrieve the full format, or use the ORDER command to place an order for these documents from a document delivery service.

?t s0/9/all

0/9/1 (Item 1 from file: 9)
 DIALOG(R)File 9:Business & Industry(R)
 (c) 2000 Resp. DB Svcs. All rts. reserv.

02412951

Store Cards Enlist Neural Networks in Fight Against Credit Fraud (Sears sees 25-30% decline in charge-off totals on credit card accounts since implementing neural network technologies, which combine human thought processes with predictive modeling, to cut fraud) Stores, p 52+
 March 1999

DOCUMENT TYPE: Journal ISSN: 0039-1867 (United States)
 LANGUAGE: English RECORD TYPE: Abstract

ABSTRACT:

Sears is among the first private label card issuers to use a neural network that combines human thought processes with predictive modeling to eliminate losses arising from store card fraud. According to Bill Redman, the firm's national director for credit, fraud and bankruptcy management, Sears has realized a 25-30%/account drop in charge-off totals since the system was installed. Experts estimate the losses arising from retail credit card fraud to be \$250 mil industrywide. MasterCard International says that in 1997, the use of neural networks helped to reduce fraud-to-sales volume by 7.7 basis points, which translates to a 14.4% decline from 1996 losses. The group adds that banks that offer their own credit card brand experienced fraud amounting to 7.7 cents/\$100 in transactions in 1997, vs 9.0 cents/\$100 in transactions in 1996. Redman says that neural networks are most efficient in identifying transactions involving stolen cards or in

situations involving identity theft or account takeover. It is not as good though in combating application fraud because it bases predictions on past card usage.

COMPANY NAMES: SEARS ROEBUCK & CO
INDUSTRY NAMES: Department stores; Retailing non-food
PRODUCT NAMES: Department stores (531000)
CONCEPT TERMS: All company; Corporate strategy
GEOGRAPHIC NAMES: North America (NOAX); United States (USA)

0/9/2 (Item 1 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)
(c) 2000 Bell & Howell. All rts. reserv.

01857794 05-08786
Fuzzy systems and neuro-computing in credit approval
Malhotra, Rashmi; Malhotra, D K
Journal of Lending & Credit Risk Management v81n11 PP: 24-27
Jul/Aug
1999 ISSN: 1088-7261 JRNL CODE: CBL
DOC TYPE: Journal article LANGUAGE: English LENGTH: 4 Pages
SPECIAL FEATURE: Charts
WORD COUNT: 1976

ABSTRACT: Fuzzy systems and neural networks are attracting growing interest among both researchers and practitioners. These systems offer advantages over traditional computational methods by offering greater flexibility, greater tolerance of imprecise data, and an ability to model nonlinear information of arbitrary complexity. Today's lender routinely blends statistical models and other emerging techniques with rules that have been developed through experience. Although analytical models are useful, a consumer-loan officer often uses rule-of-thumb to screen a loan application. To be more objective in evaluating loan applications, many institutions are now turning to artificial intelligence techniques such as expert systems, artificial neural systems, and fuzzy logic.

TEXT: Headnote:

Fuzzy systems and neural networks are attracting growing interest among both researchers and practitioners. These systems offer advantages over traditional computational methods by offering greater flexibility, greater tolerance of imprecise data, and an ability to model nonlinear information of arbitrary complexity.

Nary a lender would turn its back on a system that could learn to recognize patterns, shave loan losses, improve consistency, and, at the same time, provide greater flexibility. Today's lender routinely blends statistical models and other emerging techniques with rules that have been developed through experience. The choice of technique depends on the complexity of the institution as well as the size and the type of loan.

.
. .
.

Current Applications for the Financial Services Industry

Neural network technology is currently being used in mortgage lending to underwrite both loans and mortgage insurance. Foster Quality Conley developed AQUARIUS (Automated Quality Control Artificial Intelligence Underwriting System) to meet lenders' demands for automated underwriting systems that qualify mortgages for sale in the secondary market.

.
.
.

0/9/3 (Item 1 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2000 The Gale Group. All rts. reserv.

10882862 SUPPLIER NUMBER: 54115844 (THIS IS THE FULL TEXT)
A learning process.(includes related article on portals)(banks' use of neural networks)
Young, Kung
Banker, 149, 875, 65(2)
Jan, 1999
ISSN: 0005-5395 LANGUAGE: English RECORD TYPE: Fulltext;Abstract
WORD COUNT: 1619 LINE COUNT: 00133

ABSTRACT: Banks can enhance their relationships with clients and their competitiveness with the use of artificial intelligence, or more specifically, neural networks. Some areas of applications include trading, credit card fraud detection and portfolio management, asset management and knowledge management. The systems are based on the principle of constant training and re-training and the mimicking of the human brain. Since there is no substitute for the human brain, implementation should be left at the hands of a person with knowledge that computers cannot fully encapsulate.

TEXT: Neural networks can mimic the human brain. This can be extremely useful far banks in their bid to improve services and competitiveness . With increased competition and turbulence in the finance industry, banks are looking at ways of making better use of the plethora of data in their organization to improve relationships with their customers, and to remain competitive

.
.
.

COPYRIGHT 1999 FT Business Enterprises Ltd. (UK)

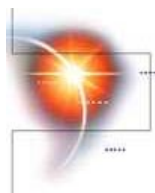
SPECIAL FEATURES: illustration; 0
INDUSTRY CODES/NAMES: BANK Banking, Finance and Accounting;
BUSN Any type of business
DESCRIPTORS: Banking industry--Data processing; Artificial intelligence--Usage; Neural networks--Usage
PRODUCT/INDUSTRY NAMES: 6010000 (Banking Institutions)
SIC CODES: 6000 DEPOSITORY INSTITUTIONS
NAICS CODES: 5221 Depository Credit Intermediation
FILE SEGMENT: TI File 148

?logoff

Online Practice Exercises

Try the following practice exercises to reinforce what you learned during this seminar. Sample answers to the questions are located in Appendix B.

1. Create a profile that includes SET commands you would like for your account (Remember you will be using a training account in a Dialog training classroom, not your own. Be sure to delete the profile after your instructor has reviewed it.)
2. In this exercise you are asked to create a profile on the use of mistletoe in treating breast cancer.
 - a. Begin by searching EMBASE (File 72) for articles on mistletoe and breast cancer.
 - b. Use the online thesaurus to find other, more scientific, terminology that may be used. KEEP any records you find.
 - c. Now search the “alternative” medical literature. A good choice is the *Allied and Complementary Medicine* database (File 164) produced by the British Library. (Be sure to ADD this database, not BEGIN it, or else you will lose your KEEP set!) There is no online thesaurus in this database. How can you restrict the searching to just File 164? (Hint: FROM qualifier). Limit the results to records that are in English or that have English-language summaries. Add these records to your KEEP set.
 - d. Next, search the major U.S. newspapers for the same topic. Again, be sure to ADD these files to the ones you already have open. Most newspaper files lack controlled vocabulary descriptors. You will need to rely on fulltext search techniques (proximity connectors and restricting to key parts of the document). Review the articles retrieved and KEEP just the most recent articles.
 - e. Finally, SORT the records in your KEEP set by publication date. TYPE the complete set out to be sure your SORT was successful.



Wrap-up

Summary

Throughout Part 4 of *Developing Dialog Searching Expertise* you focused on techniques to help you enhance your searching skills. You now know how to do the following:

- Use the RANK command options to customize your RANK information
- Use the Online Thesauri to identify search terms to conduct comprehensive searches, especially in the biomedical files. The EXPLODE feature helps you obtain retrieval of all occurrences of specified terms.
- Use the MAP command to extract search terms in specified fields. This command is especially useful in the patent and chemical databases.
- Search the numeric indexing available in many of the Dialog databases.
- Retrieve images contained in patent and trademark files.
- Remove duplicate records from the patent files
- Set up and modify your user profile to save time searching.

What's Next...

Now that you have enhanced your searching expertise with many of Dialog's techniques, you may want to focus your training on specific subject-related courses.

Subject-Specific Courses

Dialog has many courses to meet the needs of researchers in specific subject areas. For example, if you search:

Intellectual Property

- Try the patent course in four parts: *Developing Patent Research Expertise*
 - Part 1: Patent Research Basics Using DialogWeb
 - Part 2: Patent Families and Legal Status
 - Part 3: Prior Art Searching for Patent Prosecution
 - Part 4: Patent Research for Competitive Intelligence
- Check out the online course for Trademark Searching at <http://training.dialog.com>

Business

- Try any of the following business-related courses:
 - Business Applications Seminar
 - Business of Science Seminar
 - Asia Pacific Seminar

Technical

- Try the Engineering Seminar

Pharmaceutical/Biomedical

- Check out the two-part Pharmaceutical Seminar:
 - Part 1: Pharmaceutical Science Searching
 - Part 2: Pharmaceutical Business Searching
- Look at the Biomedical Seminar

Other Courses

- Other short application sessions are also available on topics such as Aerospace, Biotechnology, the Environment, Medical Devices, Food Sciences, and Cosmetics. More of these 2-hour courses will be available soon.
- Check the Dialog Web site at <http://training.dialog.com> to sign up for online courses. These courses may be taken for free at your own pace. Courses include: Dialog Basics for the Intellectual Property, Biomedical/Pharmaceutical, Business, and Technical researchers.

Other online courses are as follows:

- Competitive Intelligence
- Searching for People
- Trademark Searching

Other Dialog Training Tools

- A training tool that may help reinforce some of the concepts from this seminar include the Dialog Search Solutions available online at: <http://training.dialog.com/quick/solutions>
- Dialog's ONTAP databases provide free practice in subsets of the complete databases. They are ideal to use to practice techniques learned in this seminar. Try the ONTAP practice exercises in the ONTAP Workbook found at http://training.dialog.com/sem_info/courses/#ontap.

APPENDIX A: SET COMMANDS

SET commands can be stored in your PROFILE or can be entered anytime during your current search session. All SET commands used in your current search session (with the exception of SET PASSWORD) remain in effect until LOGOFF or until modified or cancelled by another SET command.

Command	Description
SET ADDRESS Axxxx	Specifies that prints or orders be sent to the stored address. You can have a different address stored in your PROFILE for e-mail, fax, postal, and SitePrints by modem delivery. If you use SET ADDRESS prior to entering more than one print request, it is not necessary to verify the address for each PRINT command.
SET ALIAS <alias text> <real text> Example: SET ALIAS ADJ (W) SET ALIAS	Sets up an alias of your choosing for Dialog search commands, operators, search terms, or database numbers. The alias must be a single alpha-numeric word, up to 15 characters in length. Entering SET ALIAS alone will prompt you to enter the correct information.
SET BANNERS OFF	Turns off the display of file banners when BEGINning two or more files; a single generic banner displays for all of the files.
SET BANNERS ON	Displays a banner for each individual database. ON is the system default.
SET BANNERS SHORT	Displays a one-line banner per database.
SET BANNERS LONG	Displays all available banner information; this is the system default.
SET COST OFF	Shows cost display consisting only of date if set OFF.
SET COST ON	Enter SET COST ON to restore cost display.
SET COST SHORT	If set to SHORT, cost display shows estimate for current file(s) and estimated total costs. Output charges are not separately displayed.
SET COST LONG	To restore full cost display, enter SET COST LONG, the system default.
SET COST ONESEARCH	Sets OneSearch session cost display to a single notation; also SET COST ONE.
SET DETAIL ON	Used in DIALINDEX and OneSearch, displays record counts for individual files.
SET DETAIL OFF	Cancel with SET DETAIL OFF, the system default.
SET FILES n,n,n ... Example: SET FILES 8,6,13	Sets the file order in DIALINDEX; changes the file order in OneSearch—used with duplicate detection commands.
SET H nn SET H 63	Sets horizontal line length (maximum of 132). System default is 75.

APPENDIX B: ANSWERS TO PRACTICE EXERCISES

p. 1-2: Group Exercise

Set 1:

```
b papers
begin allnews
s genetically(w)modified(3n)corn
select genetically modified(3n)corn
t s1/free/all
t s1/all
```

Set 2:

```
Begin 411
Sf biosci
S transgenic(s)sheep
Rf
Save temp
B n1:n3
Exs
T s1/6,k/1 from each
```

Set 3:

```
Begin                py=
148                  2000
expand               type
co                   s1
microsoft            /9
select               /1
e3
and
```

p. 2-23: Online Practice

1. Use File 654 (*U.S. Patents Fulltext*) to determine which companies hold the most patents for transgenic plants. Display as a continuous list in alphabetical order. Then COMBINE entries that are the same company but indexed differently.
B 654
S transgenic or genetically()(altered or modified)(5n)(plant or seed)
Rank pa cont alpha
<enter title>
m
c
<enter RANK numbers to combine>
2. Use *Chemsearch* (File 398) to identify CAS registry numbers and synonyms for the anti-depressant drug Zoloft (EXPAND on the NA=field using the name Zoloft). Then map those search terms (use the File 398 MAP code SYRN), into File 154 to find out what adverse effects are associated with this drug.

B 103
 e global warming
 e e3
 s r2

- Use the online thesaurus of *Energy Science & Technology* (File 103) to identify the appropriate search terms to use for the concept of global warming.

B 398
 E na=zoloft
 S e3
 T s1/3
 Map sym t
 B 154
 Exs
 S s1 and adverse effects
 T s2/6/all

p. 3-5: Individual Exercise

- What prefix would you use in *INSPEC* to search for Baud Rate (or bits per second)?
 BI=
- How would you write a SELECT command to search for articles discussing printer speed greater than 200 cps?
 S ps>200

p. 3-9: Practice Exercises

For this exercise assume you will be searching the numerically indexed fields in *INSPEC* (File 2). Refer to the Bluesheet excerpts on pages 3-5 and other resources provided in this section to create SELECT statements for the following topics.

- Find 30 to 60 Terabytes per second.
 SELECT BY=30T:60T OR s 30T<=BY<=60T
- Find a current less than 0.10 Amps.
 SELECT CU<0.10 OR s CU<.1
- Find a frequency between 600MHz and 660MHz, inclusive.
 SELECT FR=600M:660M OR s 600M<=FR<=660M
- Find records with a wavelength of between 490nm and 560nm (the wavelength of green light).
 SELECT WA=490E-9:560E-9 OR s 490E-9<=WA<=560-9

p. 3-20: Online Practice

1. Use File 226 (*Trademarkscan—U.S. Federal*) to locate an image of the logo for a product called “Wunderpants.” Save the image to a file.

B 226

S wunderpants

T s1/im/1

If using Dialoglink: Click and drag to highlight the image. Choose FILE, SAVE COPY AS, SAVE SELECTION and name the file. The image will be saved as a bitmap file.

If using DialogClassic.com or DialogWeb.com, position mouse over image and "right click". Choose Save Image As. The image will be saved as a .gif file.

2. Use the PATENTS OneSearch category to conduct a search for patents on robotic surgical devices held by Symbiosis Corp. Use IDPAT to identify duplicate records, then examine records identified as primary or non-duplicate.

B PATENTS

E PA=SYMBIOSIS

S E#’s

S S1 and robot?(3n)(surgery or surgical)

IDPAT

Choose Option 5

p. 4-12: Online Practice

1. Create a profile that includes SET commands you would like for your account.
2. In this exercise you are asked to create a profile on the use of mistletoe in treating breast cancer.

B 72

E breast cancer

[e R-reference number to discover the descriptor “Breast Neoplasms”]

s breast neoplasms! [to retrieve the more specific terms]

e mistletoe

[EXPAND R-reference number to discover the descriptor “Viscum”]

s s1 and s2

Keep s3

Add 164

S (mistletoe? or viscum) and (cancer? or neoplasm?) from 164

S s1/es or s1/eng

K s6

Add papersmj

S (mistletoe? or viscum)/ti,de,lp and cancer?/ti,de,lp from papersmj

T s3 [Review articles and KEEP individual ones as desired.]

Keep s7/1

Sort s0/all/pd

T s8/3/all