CONVERTING DOWNLOADED SEARCH RESULTS
INTO UPLOADED SEARCH STATEMENTS
USING DIALOGLINK OR PRO-SEARCH FRONTEND SOFTWARE

Peter Brueggeman
Scripps Institution of Oceanography Library
University of California at San Diego

Microcomputer-based frontend software facilitates database
searching by offering useful features like autodialing,
autologon, sending (uploading) search statements, capturing
(downloading) search results, editing of search results, and
cost accounting. Pro-Search (1), Dialoglink (2),
SearchWorks, and PC-Netlink are examples of microcomputer-
based frontend software designed for the search professional.
This article presents a novel use of Dialoglink or the native
mode of Pro-Search (version 1.03 or later) that saves
keyboarding time in the creation of a search that
incorporates information gathered from a previous search.

Dialoglink and the native mode of Pro-Search are designed for
experienced searchers (Pro-Search also has a high-level-
interface mode for less experienced searchers.) Dialoglink
and the native mode of Pro-Search (version 1.03+) support
composing and saving a search strategy (comprised of a series
of search statements) while offline, and then uploading it to
the database service for execution. The entire online search
session downloads automatically to the RAM memory of the
searcher's microcomputer while the search is in progress.
After logoff from the database service, the searcher decides
what to do with the downloaded search session captured in RAM
memory. The downloaded search session or portions of it can
be edited, printed, saved to disc or erased.

Both Dialoglink and the native mode of Pro-Search are of
similar design in their most basic features and can share
deficiencies. Neither allows the searcher to reuse elements
of one search session's downloaded results in the composition
of a second search strategy. Information contained in one
search session's retrieved records may need to be recycled
into a second strategy's search statements. The keyboarding
burden for the searcher increases with the number of terms to
be recycled. Currently the searcher keyboards those recycled
search terms into the second strategy even though they were

automatically downloaded as part of the first session. The
terms needed for the composition of the second strategy are
staring the searcher in the face (because they were captured
locally in the microcomputer's RAM memory) but they cannot be
used.

The stratagem presented below closes that gap. For example,
a first search can obtain titles and accession numbers and
then selected accession numbers can be used in a followup
search to obtain the complete records. Similarly downloaded
Chemical Abstracts Registry numbers, authors' names,
companies' names, search statements, Standard Industrial
Classification codes, or journals' names can be reused
depending on the situation. The examples are specific for
searching Dialog with Dialoglink but the stratagem also works
for searching BRS with Dialoglink, as well for searching
Dialog or BRS with the native mode of Pro-Search. It
probably works for other database services but the author has
not investigated all the possibilities. In the examples, BRS
searchers should translate Dialog's "type" command into BRS'
equivalent "print" command.

ACCESSION NUMBERS

Accession numbers of database records present a cost-saving
opportunity. The searcher can execute a search for a
requestor and then type the titles and accession numbers of
the records retrieved. The search requestor scans the titles
retrieved and then indicates which titles should be typed in
full to compile a bibliography. The searcher inputs those
selected titles' accession numbers in a followup search
session and then types the corresponding bibliographic or
full records. Using this cost-saving stratagem, the search
requestor pays citation charges for only what is needed. The
per-citation cost for titles and accession numbers is usually
much less than the per-citation cost for the bibliographic
citation or the full record; oftentimes it is zero. However
the searcher has a tough time dealing with this stratagem
since the accession numbers have to be keyboarded
individually in the followup search. Accession number
keyboarding is excruciatingly tedious and open to error.

Dialoglink (or the native mode of Pro-Search) can be
manipulated to facilitate this second step in conjunction
with the DOS rename command. If the search is executed with
the requestor present, review the search session with the
requestor immediately after logoff. The session was
automatically downloaded into the microcomputer's RAM memory

(Dialoglink's retrieve buffer) and includes the typed titles
and their accession numbers. Review the downloaded titles
using the PgUp, PgDn, and the cursor keys. The requestor
indicates the interesting titles; use the line-editing
feature of Dialoglink to keep (mark) only those lines that
hold desired accession numbers (and also to keep the command
line to begin the database.) Next capture the marked lines to
a disc file and Dialoglink saves them as a "reference" file.

Exit Dialoglink to DOS and rename the file extension of the
reference file from ".REF" to ".SRC". (For Pro-Search,
change the file extension from ".REF" to ".SCH".) Dialoglink
names its downloaded-to-disc reference files with the file
extension ".REF"; saved-search-strategy files are named with
the file extension ".SRC". Renaming the file extension
converts the reference file into a mutant saved-search-
strategy file and allows the searcher to subsequently edit
this file into shape for uploading. Dialoglink has an
editing capability used in creating search strategies for
subsequent uploading or saving, and also in modifying saved
search strategies. Re-enter Dialoglink and load the mutant
saved-search-strategy file onto the screen (load Dialoglink's
type-ahead buffer.) Use Dialoglink's editing features to
edit the mutant search strategy until it looks right. Delete
the question mark prompts, insert a "t" in front of each
desired accession number, and insert a slash and a print-
format number after each accession number. Delete any
extraneous information in the accession number field. Pay
particular attention to the database documentation regarding
the accession number field; sometimes there can be two
numbers in the field and only one of them can be searched.
After editing is completed, logon to Dialog and upload the
mutant saved-search-strategy file. Dialoglink captures the
desired references in RAM memory.

If the search requestor is not present at the time of the
search, invoke the same stratagem. However save all of the
titles and their corresponding accession numbers to disc
rather than selected accession numbers only. Give the search
requestor a printout of the titles to scan and to indicate
the titles desired. Convert the reference file to a mutant
saved-search-strategy file and then load it onto the screen
at a later date for editing into shape. More line-deletions
are involved in editing under this scenario but anything is
better than keyboarding those damn accession numbers. Both
Dialoglink and Pro-Search limit the size of a saved-search-
strategy file; see the last paragraph for a discussion of
specific limits and how to get around them.

SEARCH STRATEGIES

Dialoglink and Pro-Search support local storage of search
strategies that can be executed subsequently; thus search
strategies can be formulated offline to save money on the
keyboarding time, and SDI searches and search "hedges"
can be stored and managed locally. While executing
a stored search strategy and reviewing the results retrieved,
the searcher may discover new or modified search statements
that are particularly effective and should be incorporated
into that saved search strategy for subsequent use.
Dialoglink and Pro-Search do not incorporate newly-discovered
or -modified search statements into a saved search strategy.
Additions or modifications have to be keyboarded during an
editing session, and the revised search strategy has to be
saved. This is no big deal if only a few search statements
are involved but if it gets involved, try another approach.

All the search statements used during a search session are
automatically downloaded into RAM along with the whole search
session. Use Dialoglink's (or Pro-Search's) line editor to
keep (mark) only those search statements desired. Save those
marked search statements to a disc file. Exit to DOS and
rename the file to a saved-search-strategy file. Re-enter
Dialoglink, load up the file, and edit it into a respectable-
looking search strategy. This is particularly easy because
only the question mark prompt has to be deleted. If Dialog's
"display sets" command is used to list all of the search
statements for subsequent editing, then more editing will be
required than with the method suggested above. If BRS'
"display all" command is invoked, then the editing effort is
about the same compared to the method suggested above.
Finally, after editing, save it as a new search strategy
file.

The general stratagem presented in both examples does have
limits. The microcomputer's RAM memory limits the amount of
information that can be automatically downloaded into RAM.
Both software require at least 256K RAM; this suffices for
many situations but more RAM is desirable. Both software
also limit the size of a saved-search-strategy file. For
example, Dialoglink's manual states that the limit of a
saved-search-strategy file is approximately 20,000
characters. This file size corresponds to approximately 126
Dialog format-six references retrieved from the BIOSIS file.
Similarly, Pro-Search's manual states that its limit is
approximately 12000 characters. If the downloaded-to-disk

reference file is over 20K for Dialoglink or over 12K for
Pro-Search, then it cannot be immediately renamed as a saved-
search-strategy file and edited using Dialoglink's or Pro-
Search's editor. Instead copy it to word processing software
and edit it into a search strategy. After editing, rename
the file extension as a saved-search-strategy file (.SRC or
.SCH) and copy it to Dialoglink or Pro-Search. Be sure to
save the edited file as an ASCII file (e.g. Wordstar's non-
document mode) when using word processing software.

1) Barbara Quint, "Menlo Corporation's Pro-Search: Review of
a Software Search Aid", ONLINE, v.10, n.1, Jan. 1986, pp.17-
25.

2) Aggi Raeder, "Dialoglink, Product Evaluation of a New
Communication Software from Dialog", DATABASE END-USER, v.2,
n.4, April 1986, pp. 17-21.
 