AN INTRODUCTION TO ONLINE SEARCHING

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In Memory of My Father,
Ken-hsiang Li, Esq.

Preface

This book intends to familiarize readers with online searching, stressing bibliographic searching basics. The study consists of two parts. In Part one, readers are introduced to the development of online searching, selected reference sources of which a beginner should be aware, and features of online searching and thesauri. Also in this part, types of databases, database vendors, and library management of online searching services are briefly discussed. Part two, the heart of the book, is devoted to searching basics including three manuals for DIALOG, SDC, and BRS systems with some exposure to DIALOG's Knowledge Index and BRS/After Dark services. Readers are also introduced to CompuServe, The Source, and Dow Jones searching basics and to the use of microcomputers for searching and downloading.

All major vendors have their own searching manuals as well as simplified versions for training beginners. The manuals are compiled in such a way as to reflect a vendor's particular preference and emphasis. It is not easy for a beginner to comprehend the various systems by using manuals which differ in their format, arrangement, and approaches. The three manuals in Part two are compiled and arranged in as consistent a format and approach as possible to facilitate using and comparing the three systems. The step-by-step approach, from

simple searching to searching variations to non-subject searching, should be easily understood by readers. Also discussed are searching features and basics of CompuServe, The Source, and Dow Jones services.

The book features searching basics of major vendors of bibliographic services and information utilities. It is of particular use to those who have little or no experience in online searching. Experience in classroom teaching suggests that a reader should be able to grasp the basic searching skills of the three systems after having read the chapters on the searching basics, and having had, with pre-searching preparations, three to four hours of hands-on practice.

One of the problems in using the DIALOG, SDC, and BRS systems is the diversity in searching protocols, commands, and print format options. Even single systems lack standard and consistency in the fields of unit records and print format options. The last chapter presents the problems of diversity in searching and the need for standardization.

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Abbreviations

Note: This list does not include database commands and codes for searching.

AACR2	*Anglo-American Cataloging Rules.* 2nd edition
ACCT	Accounting System (database)
ACS	American Chemical Society
AGRICOLA	AGRICultural On-Line Access (database)
AIM	*Abridged Index Medicus*
ALA	American Library Association
AMI	Advertising and Marketing Intelligence (database)
AMIS	Account Management of Information System
ARIST	*Annual Review of Information Science and Technology*
ARPA	Advanced Research Projects Agency
ASCII	American Standard Code for Information Interchange
BALLOTS	Bibliographic Automation of Large Library Operations Using a Time-Sharing System
BIOSIS	BioSciences Information Service (database)
BKS	Books file in RLIN
BLAISE	British Library Automated Information Service

BPS	Bits per second
BRS	Bibliographic Retrieval Services
BT	Broader term
BULL	BRS/Bulletin (database)
CA	*Chemical Abstracts*
CAB	Commonwealth Agriculture Bureau (database)
CAIN	CAtaloging and INdexing System of the National Agricultural Library (database)
CALS	Computer-Assisted Literature Searching
CASSI	Chemical Abstracts Service Source Index (database)
CBPI	Canadian Business Periodicals Index (database)
CDI	Comprehensive Dissertation Index (database)—now Dissertation Abstracts Online
CHEMNAME	CA Chemical Name Dictionary (database)
CHEMSIS	CHEM Singly Indexed Substances (database)
CIJE	*Current Index to Journals in Education*
CIN	Chemical Industry Notes (database)
CLASS	California Library Authority for Systems and Services (now Cooperative Library Agency for Systems and Services)
CROS	BRS/CROS (database)
CNI	Canadian Newspaper Index (database)
COHD	Copyright Office History Document
COHM	Copyright Office History Monograph
CPS	Characters per second
CR	Carriage Return
CRDS	Chemical Reactions Documentation Service (database)
CRT	Cathode-ray tube
DBI	Data Base Index (database)
DIMDI	Deutsches Institut fer Medizinische Dokumentation und Information
EDP	Electronic data processing
ERIC	Educational Resources Information Center (database)
ESA	European Space Agency
GPO	Government Printing Office
IAC	Information Access Company

ID	Identification
INKA	Information System Karlaruche
INSP	INSPEC (database). See below.
INSPEC	INformation Service in Physics, Electrotechnology and Control (database)
In-WATS	Inward Wide Area Telephone Service
IRCS	International Research Communication Service
IRS	Information Retrieval Services
ISBN	International Standard Book Number
ISI	Institute for Scientific Information
ISO	International Organization for Standardization
ISSN	International Standard Serial Number
LRI	Legal Resource Index (database)
MARC	MAchine Readable Catalogue Project
MDC	Mead Data Central
MEDLARS	Medical Literature Analysis and Retrieval System
MEDLINE	MEDLARS On-Line (database)
METRO	Metropolitan Reference and Research Agency
MI	Magazine Index (database)
MRDF	Machine-readable data files
NAARS	National Automated Accounting Research System (database)
NASA	National Aeronautics and Space Administration
NCJRS	National Criminal Justice Reference Service (database)
NLM	National Library of Medicine
MNI	National Newspaper Index (database)
NT	Narrower term
NTIS	National Technical Information Service (database)
NUC	*National Union Catalog*
NYTIS	The *New York Times* Information Service
OBAR	Ohio Bar
OCLC	Online Computer Library Center
ONTAP	ONline Training And Practice
ORBIT	On-Line Retrieval of Bibliographic Information Timeshared
PAIS	Public Affairs Information Service (database)
PREM	Pre-Med (database)

PsycINFO	Psychological Abstracts Information Service (database)
PTS	Predicasts Terminal System
RAM	Random access memory
RASD	Reference and Adult Service Division
RECON	REmote CONsole
RIE	*Resources in Education*
RLIN	Research Libraries Information Network
RT	Related term
SCORPIO	Subject-Content-Oriented Retriever for Processing Information On-Line
SDC	System Development Corporation
SDI	Selective Dissemination of Information
SN	Scope note
SRIF	School Practices Information File (database)
SSCI	Social Sciences Citation Index (database)
STAIRS	STorage And Information Retrieval System
TI	Trade and Industry Index (database)
TWX	Teletypewriter Exchange Service
UF	Used for
UNISIST	United Nations Information System in Science and Technology
USPSD	United States Political Science Documents (database)
VDT	Visual display terminal
WPI/WPIL	World Patents Index/World Patents Index latest, (database)

Contents

Part One

1

Introduction

The term "online searching" refers to the use of a computer to retrieve information online from databases.[1] A database contains machine-readable records for the purpose of information storage and retrieval. A distinction may be made between databases and data banks. Databases are bibliographical. A typical one consists of citations with or without abstracts. Data banks are non-bibliographical. They allow the user to directly retrieve data without using a primary source for further information. The difference between data banks and databases becomes, however, less distinct in practice.

Information in the databases may be retrieved in either batch or online mode. The batch mode, also known as serial or sequential, is the predecessor of online. Data are collected and processed in a particular group or batch. The input data must be sorted and organized serially or sequentially or in some logical order before they can be processed. In contrast, the online mode features direct-access processing with a keyboard connected to the central processor and without the use of media such as punched cards. It is conducted as if the user conversed with the computer. Each takes a turn in conversation. The online processing, therefore, also called conversational or interactive.

Online systems are best suited to applications in which the computer is used to maintain large files of information and to re-