seminar handout:

INTRODUCTION TO SEARCHING INIS ON CD-ROM

Wilhelm Mandl, INIS Training Seminar, 2-6 June, Vienna

This handout is a printout of chapter 6: "INIS Database on CD-ROM" of the INIS Distance Learning Module: "How to use the INIS Bibliographic Database".

The Distance Learning Module is freely available on the Internet at: http://www.iaea.org/inis/dlp/inisqu/.



INIS on CD-ROM

The entire bibliographic database - covering nuclear literature from 1970 to the present - is available on a collection of CD-ROMs.

Strong points are:

- comprehensive coverage of the worlds nuclear literature
- · quarterly updates
- professional database search interface
- · local installation no Internet related bandwidth problems

The present chapter will walk you thru the installation and usage of INIS on CD-ROM.

6 INIS Database on CD-ROM

6.1 WinSPIRS retrieval software

Installing the retrieval software

Before you can use INIS on CD-ROM you need to install the $\mbox{SPIRS}^{\mbox{$\ensuremath{\mathbb{C}}$}}$ retrieval software.

Current versions of

WinSPIRS

retrieval software for Windows

MacSPIRS

retrieval software for Macintosh

and others

are available on the 'SilverPlatter Resource CD'. Latest versions can be obtained from the SilverPlatter web site.

If you are using the demo version, you will find the required retrieval software on the demo CD itself.



6.1 WinSPIRS retrieval software

6.1.1 Installing WinSPIRS

Installation from the Demo CD

When installing the SPIRS retrieval software using the 'INIS Demo CD' you should proceed as follows:

- 1. Insert the INIS CD in the CD-ROM drive.
- 2. Start the setup program by double clicking on the file name: '\disk1\setup.exe'
- 3. When the WinSPIRS Setup screen appears, click Continue to continue the installation, follow the instructions on the screen.

That's it.

Attention:

- The root directory of the CD-ROM contains an 'install.exe' file. Executing this file will install PC-Spirs for MS-DOS on your computer. You are of course free to use the DOS version of SPIRS, but this is not covered in this tutorial.

- The INIS Demo CD is updated in intervals of several years only. If your demo CD was not published recently, you are advised to obtain up-to-date retrieval software from SilverPlatter's web site. The demo database itself will still be valid.



When installing the SPIRS retrieval software using the 'SilverPlatter Resource CD' you should proceed as follows:

- 1. Insert the INIS CD in the CD-ROM drive.
- 2. If the welcome screen does not come up by itself, click on 'index.htm' in the disk's root directory
- 3. Select 'Software and Documentation'
- Select 'Software Products'
 Select 'WinSPIRS' or 'MacSPIRS' as required for Windows
- or Macintosh PCs
- Download the software installer into a temporary location.
- 7. Run the installer by double clicking onto it.
- 8. Install by following the instructions on the screen.

Please note: Current versions of the SPIRS retrieval software for Windows, Macintosh and UNIX operating systems can be found at the SilverPlatter web site.





6.1 WinSPIRS retrieval software

6.1.2 Starting WinSPIRS

Running WinSPIRS

Once the installation has been successfully concluded, you simply start the WinSPIRS retrieval software via the Windows start menu.



Running WinSPIRS

If at least one database file has been located during the startup phase of the program, you will be invited to start a database session.



If only one database was found during startup it will be selected automatically, otherwise the 'Available Databases' popup window will list all database files found.

Selecting database files

You must now select one or more of the databases found.

Available Databases	
Select the database or databases you want to use Choose from these Databases:	
D:INIS Demo	
E:INIS 1997-2000	
Use these Databases: vv Add vv ^^ Remove ^	<u></u>
D:INIS Demo	
Description Refresh OK	Exit <u>H</u> elp

You can now use and and to select which database files you want to search.

The 'Selecting Databases' dialog box is available at any time during program operation via the **Patabase** button, allowing you to select one or more databases from those available. If necessary, remove a disk from the CD-ROM drive and insert a new disk. WinSPIRS will automatically remove the associated databases from the selection list.

6.1 WinSPIRS retrieval software

6.1.3 Multi CD access

Accessing more database files

What happens if you want to search more database files simultaneously than there are physical CD-drives on your workstation?

The simplest solution is to search them sequentially. The procedure is to conduct a search on one CD, to change the CD using the Potabase dialog and to repeat the search. Please note that your query strings are preserved during the exchange of CDs, so the procedure is not quite as cumbersome as it seems.

Another solution is to use physical CD-drives or directories on a LAN. WinSPIRS will recognize such installations if they are mapped to local drive letters.



The most elegant and efficient method is probably to install several volumes in one directory on your workstation or on a network drive.



Several volumes in one directory

If you have enough hard-disk space, you can copy several or even all CDs onto a hard-disk.

Create a directory with one sub-directory for each CD you want to copy, then copy the entire contents of one CD into each of the sub directories.

In order to enable WinSPIRS to locate your local database installation you need to edit the file 'winspirs.ini' in the winspirs directory. Simply add the path to your local installation to the [CORE] section. Enter databases as a list separated by

semi-colons (;) or use the wildcard * at the lowest level of a path to include all databases in that subdirectory.

In our example we would write:

[CORE] DRIVES=c:\inisdb* MAGDRIVE=1

Equivalently, if we had copied the CDs to a server we would write:

[CORE] DRIVES=\\servername\inisdb* MAGDRIVE=1

Please note that yet other means of configuring client-server installations exist. Please refer to the *WinSPIRS User's Manual*.



You understood that?

Getting the software running on your computer and having access to the database files is a necessary pre-requisite for any further work. If you are someone who is responsible

for local installations, you should be comfortable answering the following questions:

The SPIRS database software:

Ineeds to be installed
Ican be run off a CD, without installation
Ican be found on the INIS Demo CD
Is part of the database CDs
Is available from the SilverPlatter web site
Is available on a 'Resource CD'

Database CDs:

□can only be used one-at-a-time □can be copied to a local hard-disk □can be accessed on remote drives □can be installed on a file server

6 INIS Database on CD-ROM

6.1 WinSPIRS retrieval software

6.1.4 ERL client/server technology

ERL networking technology

The INIS Database is ERL (Electronic Reference Library) compatible. Running on a variety of platforms including: Windows NT, Solaris, and LINUX, the ERL database server provides powerful and flexible access to databases.

Detailed information on this technology can be found on SilverPlatter's web site.

Subscribers to the INIS Database on CD-ROM are entitled to use this technology. Please contact the INIS Central Services Unit for an '*ERL Authorization Sheet*'.

6.2 Understanding the user interface



6 INIS Database on CD-ROM

- 6.2 Understanding the user interface
- 6.2.1 The main screens

The default search screen

On start-up, you will be presented with the search screen:

Sear <u>c</u>	h:		Sear	ch Sugg
No.	Records	Search	Search History	
			<u> </u>	Show
			-0	Li <u>m</u> it
			10	Retype
			-	Clear

It is the main vehicle for your work. The other main screens facilitate working with index files and with the INIS/ETDE Thesaurus.

Please note that WinSPIRS also offers a facility to access databases via a 'table of contents'. However, this option is not available for the INIS Bibliographic Database - the button is therefore not active.

Toggling between main screens

The icons on the button bar on top of the WinSPIRS window give quick access to the main screens:

🦻 Searches

The main search window is where you assemble query strings and conduct searches.

🖺 Index

Access to index files and related database statistics.

🔳 Thesaurus

Facilitates working with the INIS/ETDE Thesaurus. one of vour

main search tools.

6 INIS Database on CD-ROM

- 6.2 Understanding the user interface
- 6.2.2 Function buttons and menus

Operating WinSPIRS

Communication with WinSPIRS is via

- pull-down menus
- function buttons
- edit windows

Some of these elements might initiate an immediate action while others will open a dialog box for further user interaction.

Function buttons are context sensitive and offer quick access to the main functionalities in a given situation. Full functionality is, however, only accessible via the pull-down menus.

File Edit Utilities Records Mark Options Views Help

Professional database users will appreciate the quick navigation feature using function keys and hot-keys. This feature must seem cumbersome for the occasional user but the accustomed user will benefit from a faster turn around time.

Sourches Inde <u>s</u> Table of <u>C</u> <u>I</u> heocurus	ontenta	52 F5 53 F9	
 Spit Serr Sparch F Becords 	Start of Becom End of Record Next Record Bresious Reco Next Hit Previous Hit Undo Lati Mo	d I VG	Ctrl+Honse Ctrl+PgDn Ctrl+PgDn Ctrl+Down Ctrl+Down Ctrl+Up Ctrl+Up

✓ Spit :

Keyboard shortcuts are identified on the pull

down menus and some of the most important shortcuts are listed on the 'WinSPIRS Quick Reference Card'.



Is it clear?

Try to reflect what you have just learned.

The SPIRS database software is operated using:

□function buttons □pull down menus □keyboard shortcuts □pop-up dialog boxes

Help on how to run WinSPIRS can be found in:

□the WinSPIRS help menu □this tutorial □'Quick Reference Cards' □the 'WinSPIRS User's Manual' □the 'Glossary of Terms'

Now start up WinSPIRS and familiarize yourself with the WinSPIRS help menu!

6 INIS Database on CD-ROM

6.3 Conducting searches

Getting to work

If you are familiar with the Internet based access to the INIS Bibliographic Database, you will know about search panels called:

- 'Simple Search'
- 'Main Search'
- 'Combining previous search results'
- 'Command mode'

In WinSPIRS there is only one search screen fulfilling all these tasks. That's easy, let's get to work!

6.3 Conducting searches

6.3.1 Searching with free text



Exercise: conducting a search

This course module emphasizes 'learning-by-doing' as one of it's core didactic principles. So start up the database and conduct a search!

To conduct your (first ?) search please:

- 1. Start up the database.
- 2. Type 'INIS' into the search window
- 3. Press the Search button

Congratulations, you have done it !!

Did you feel like doing a 'Simple Search' or was it more like conducting a search in an advanced 'Command Mode'? Maybe you felt like using the 'Main Search Panel'.

Search results

The result of the previous exercise will have looked similar to:



The 'screen options' icons **B B a**llow you to toggle between the present split-screen display and full-screen displays of the display history and the retrieved records area.

Inspecting the results

The 'retrieved records area' lists all database records that match your query. You can browse the results by pressing the [Page Up],[Page Down] keys on your keyboard or by clicking the and symbols on the scroll bar.

The exact display options can be selected using the 'Show Options...' dialog box.

 Options
 Yiews
 Help

 Print Options...
 Show Options...
 Download Options...

 Download Options...
 Show Intermediate Results
 Show Hits Per Database

 Y East Phrase Searching
 Automatic Records Display

 Colours...
 Colours...
 Colours...

Language Options...

With the **Next Hit** and **Previous Hit** buttons you can step thru the occurrences of your search terms within the results.

The function buttons All Fields and Brief Fields

toggle between a display of all database fields and your customized selection of fields.

6.3 Conducting searches

6.3.2 Syntax of the query statement



How to formulate a query

In the previous example you have conducted a very simple search. What else is there to it?

Generally, a valid query string consists of

- 1. one or several search terms
- 2. optionally you may use operators
- 3. optionally you may specify specific fields to be searched

Search terms may be phrases consisting of several words or be hyphenated, even an entire complex query string might be treated as a search phrase. You are encouraged to use parentheses wherever they help to clarify the semantic content of a query.

Valid query strings have the general form:

phrase phrase1 operator phrase2 (phrase1 operator phrase2) operator phrase3 phrase in field

We will discuss a number of concrete examples and special cases in the course of this chapter.

Wild characters

In cases where you want to cover multiple grammatical forms of a word or you anticipate variations in the spelling (e.g. British English versus American English) you may use the wild characters:

- * to replace zero to several characters (including zero)
- ? to replace zero to one character (including zero)

Wild characters can be used anywhere in a search term except as the first character:

alumin?um

will search for both 'aluminium' and 'aluminum'

cent?r?

will search for 'center', 'centers' and 'centre'

cent*

will search for 'cent', 'center', 'centers', 'centre', 'centres'

Several terms might be specified by separating them by semicolons:

nuclear; desalination

will conduct two independent searches, one for the term 'nuclear' and another one for the term 'desalination'

Using operators

In WinSPIRS you can deploy several binary operators that allow you to form compound search queries:

and

or

finds records that contain both of two terms

.

finds records that contain either of two terms

not

finds records that contain one record but not the other

near

finds records that contain both of two terms in the same sentence

with

finds records that contain both of two terms in the same database field

Please note that the operator 'not' is used in the sense of 'but not'. In order to find all records which contain the term '*desalination*' but not the term '*nuclear*' we write:

desalination not nuclear

Please be careful when using the 'not' operator. The example above also removes all records which contain the phrase: *We are describing non nuclear desalination projects.*

Operators and stop words in a search phrase

If a search term has the same spelling as an operator, it must be encased in quotes. For example in order to search for the term 'near isotopic graphite' you must write either

'near isotopic graphite'

or

'near' isotopic graphite

On the other hand, the search

near isotopic graphite

will yield all records where the terms 'isotopic' and 'graphite' appear in the same sentence.

Please note:

- 1. you are at liberty to use pairs of single quotes ' or pairs of double quotes " as you please
- 2. stop words will automatically be removed from your query, even if they are enclosed in quotes



Did you get it?

Operators are important tools in formulating a query. Make sure you understand them well!

Which of the following queries will return most and least

hits?

most least

- □ □ nuclear desalination
- □ □ nuclear and desalination
- □ □ nuclear or desalination
- □ □ nuclear with desalination

nuclear near desalination

Now start up WinSPIRS and check it out yourself!

6.3 Conducting searches

6.3.3 Using the search history

Using previous queries

The search history window displays your previous search strings and the number of hits they have scored.

No.	Records	Search	Search History
#1	985341	nuclear	
#2	1479	desalination	
#3	874839	energy	
#4	929	#2 and energ	W
#5	744	#1 and #2 an	di#3
#6	744	nuclear and o	iesalination and energy 🚽 🏑

One nice feature of the search history is that you can at any time redisplay the results of one of your previous searches by simply double clicking on it. Alternatively you may highlight a previous search and click Show

If you want to repeat a previous query with modifications, you can highlight it and click on Retype. This will copy the previous query string into the search window where you may modify and refine it.

Once the search history gets a little too long for your taste, the selectively some or all of the search history.

Combining previous queries

A very powerful feature of WinSPIRS is that the entries in the search history might themselves serve as search terms. That way you can combine previous searches or combine previous searches with new search terms.

- 1479 desalination #1
- #2 885341 nuclear
- #3 1022 #1 and nuclear 1022 #4 #1 and #2
- #5 1022
- desalination and #2 #6 1022 desalination and nuclear

·Beginning a search with an operator automatically combines that request with the previous one.

If the search just completed is *desalination*, searching for *and* nuclear gives the same result as if you search for desalination and nuclear

•Previous searches can be referenced by their numbers: #1, #2, etc.If search one in the history list was *desalination* and search two was *nuclear* then the query string #1 and #2 is equivalent to typing *desalination and nuclear*

Equivalently you may also write *#1 and nuclear* or *desalination* and #2

Please note: If you wanted to search for the string #1 rather then referencing guery number one, you must apply guotes: "#1"

6.3 Conducting searches

6.3.4 Searching specific fields

Using the granularity

The INIS Bibliographic Database is highly structured. Different types of information are stored in specific locations, so-called database fields. A listing of the 'Fields to Search...' is available via the 'Utilities' menu:



The syntax is to write a search term first, followed by the operator 'in' and followed by a field label.

Example: To select records where the name 'Mourogov' appears in the author field, one would write:

mourogov in au

Remembering field labels

How do you remember all the field labels? With time you will of course get to know the most frequently used labels, but in the mean time you can use the 'Field List' dialog box which can be found via the 'Utilities/Fields to Search....' menu.



The procedure to use the 'Field List' is to

- 1. enter a search term into the search window
- 2. select a field from the 'Field List' by double clicking onto it or by using the Add To Search button
- 3. press the Search button to initiate the search

You may select several field names if you want to search several

fields. If only one field is highlighted you can press **Description** for a description and search example of that field.

6.3 Conducting searches

6.3.5 Finding similar documents



Finding search terms

If you are new to a subject or to INIS, you might find it difficult at first to come up with good search terms.

In such cases it is a good and helpful strategy to start with a few rather vague terms. You can now inspect the results and if you find references that match your expectations, you can simply highlight characteristic parts of them and press the Add To Search at the bottom of the main search window.

That way you will collect a list of semicolon separated search strings. Before executing the search, you should replace the semicolons by suitable operators.

"France" in CA; "plutonium" in AB; "government-policies;" in DEC should become:

"France" in CA and "plutonium" in AB and "government-policies" in DEC

Finding what's related



If a document contains independent contributions, then the the database will contain one entry relating to the document as a whole as well as entries for each of the individual contributions.

You might, for example, have stumbled upon one of the contributions to IAEA's technical document with the report number 1173. In such cases the 'AN' field of the related records will contain not only the accession number of the current record but also the accession number of the enveloping document.

You can now find all the related references by searching for the related accession number:

an=31-065245

The search returns 11 hits, one related to the whole document and 10 referring to the contributions of individual authors.



TI: Calibration of plane parallel A sub L sub L for the NACF and gamma-ray beams AU: Palm,-Aa., Mattsson,-O. (Depa University, Goeteborg (Sweder T-fetion Physics Section

It is now easy to find the leading record by searching for the descriptor "leading-abstract" in the descriptors field:

and "LEADING-ABSTRACT" in DE



Exercise: 'leading abstract'

Some of the descriptors in the descriptor field are not used to describe the subject content of a document but to identify a particular type of document.

The descriptor 'leading-abstract' is such an example. It **must** be present in any record which describes an entire document when individual chapters or sub-units of that document have database entries of their own.

Check it out now!

- 1. start up the database
- 2. search for the report: IAEA TECDOC 1173 (iaeatecdoc1173 in RN)
- limit the search results to the "lead" record (and ("LEADING-ABSTRACT" in DE))

What do you find?

 \Box only the one "lead" record which describes the entire document \Box all related records

- Donly the sub-units of the document
- □the "lead" record and one sub-unit

Do your findings surprise you? They should not! Errors and mistakes are a constant in human activity and one has to be alert at all times.



6.3 Conducting searches

6.3.6 Narrowing the search

Limit fields

Some database fields are called limit fields. These are specially indexed fields with relatively few possible values. They allow you to limit your search to references with a particular characteristic such as year of publication or type of publication.

The following limit fields are available in INIS:

PY - publication year Year in which the original document was published. LA - language of text Language in which the original document was published. CI - country of input Country name of the INIS participating centre which has contributed the citation. This is generally the same as the country of publication. PT - publication type Format of the original document. IS - international standard numbers ISBN, ISSN, CODEN or IPC CC - subject category codes Primary and secondary subject codes C1 - primary subject category codes Code indicating the general subject of the original document UD - update code A 4 digit number representing the INIS Atomindex in which the record was available. The first two digits are the volume number and the last two digits are the issue/update number. AN - accession number and related record A unique number assigned by INIS to each record. If this record is in some way related to another record in INIS, the accession number of the related record is also listed.

Numeric field operators

You may use limit fields like any other field. *2000 IN PY* will retrieve all records published in 2000. However, with limit fields you may also use the numeric operator '='.

PY = 2000

Further numeric field operators:

- > greater than
- < smaller than
- >= greater or equal than
- <= smaller or equal than
- range

are applicable for the fields: PY, CC, C1, and UD

For example:

CC = S01-S04

will extract all records with subject categories S01 to S04 from the database, while $% \left({{{\rm{S0}}} \right)$

PY >= 2000

will find all publications since the year 2000.

Using limit fields

Limit fields can be used like any other database field, however, their main strength is in limiting the range of results of a more general search.

For example, you may have searched for the term 'nuclear desalination' in the abstract and title fields:

nuclear desalination in ab, ti

To limit the results to -say- only books, you can now press the Limit... button



and (PT = "BOOK")

You may now want to continue and limit your query results to publications within the time span 1995 to present. So you select "PY", the operator ">=" and the year 1995. Pressing the $\Box \kappa$ button will limit your previous search using:

and (PY >= "1995")



What are the limits?

Think about it!

Limit fields are:

□at the edge of the database □full to the upper limit □limiting your access rights Or are they something else:

□specially indexed fields with few possible values □you may also use the numeric operators □mainly used to narrow down a broader search

6.3 Conducting searches

6.3.7 Searching using the index

Using index files

You have already seen how to use an index in the case of special limit fields. However, the contents of all fields are available in index files. To access index files you have to open the **index screen** using the button

🐥 Databa	se 🚔 Print	Download	Searches	Thesauru
nde <u>x</u> : ('	F - Free Text	Index)		Look U
				Change
Records	Occs	Entry	Index <u>T</u> erms	
258257	869496	A		Show
121	138	A-		<u> </u>
22	27	A-A		Search
1	1	A-AA		
1	1	A-AAE		
1	1	A-ACHSENORIENT	IERTER .	

The initial screen displays the free text index: an index of all words that occur in free text fields.

Inde <u>x</u> :	{ ⁼F - Fn	E
nuclear	input	window
Records	Occs	Entry
10527	27398	NUCLEAR
1	1	NUCLEAR-
3	3	NUCLEAR-AGRICUL
5	5	NUCLEAR-ALIGNMEN
1	1	NUCLEAR-AND-PARTH
1	1	NUCLEAR-BASED
47	47	NUCLEAR CASCADES
2	2	NUC CHEMICAL
5	5	UCLEAR-CHEMISTRY
1	1	NUCLEAR-CONVERSION
2 🐶	00	NUCLEAR-CORES
а 눩	9	NUCLEAR-DAMAGE
1	1	NUCLEAR-DANGEROUS
116	116	NUCLEAR-DATA-COLLE
332	332	NUCLEAR-DECAY
73	73	NUCLEAR-DEFORMATION
1	1	NUCLEAR-DENSITY
1	1	NUCLEAR-DEPENDENT
12	12	NUCLEAR-DETERRENCE
•		

Working with the index

Typing an expression or part of an expression into the navigation field will get you to a specific location within the index file.

At that point three different actions might be taken:

1 - press Look Up
to find all records containing the string
in the input window
2 - highlight a term in the index
window and press Show
to display all records containing the
selected term
3 - highlight a term in the index
window and press Search
to export a query string into the main
search window

Searching an author

A particular, very frequently conducted search consists of finding publications by a particular author.

The first step is of course to look up possible variations in the spelling of an author's name in the index file. The query syntax for finding authors names is to leave out any blanks and punctuation but to hyphen between the surname and the initials. If there is an aristocratic title or a prefix like 'von', 'van', 'de', etc. that is added with another hyphen at the end.

surname-xy-prefix

But even then the problem remains that there is some ambiguity with the presentation of names:

For example, if you wanted to look for the author : Manfred G. von Hellermann or for Claudio De Michelis you would correctly type:

hellermann-mg-von in au michelis-c-de in au

These searches will, however, return incomplete results. Middle initials and titles might not be present in the authors field and the prefix 'de' is frequently interpreted as part of the surname itself. More complete search results will therefore be obtained if you use:

hellermann-m* in au

(michelis-c* or de-michelis-c?) in au

If there is no question of name pre-fixes you should still allow for the presence or absence of middle initials. Looking for Hugh P. Summers you should write:

summers-h? in au rather than:

summers-hp in au

Finding a report by report number

Laboratory reports are usually issued with a serial number, the so called report number. These report numbers usually follow some common pattern that is constant with a given issuing organization. Examples are:

IAEA TECDOC xxx

for IAEA's technical documents

IAEA SM xxx

for IAEA's safety manuals

DOE OR xxx yyy

for documents from the US DOE's Oak Ridge Laboratory JAERI CONF xxx yyy

for conference proceedings by the Japanese Atomic Energy Research Institute

Even if you know the exact report number as printed on a particular document, it would still be difficult to figure out how many hyphens '-' or slashes '/' are used in the blank-free representation of the report number in INIS. It is therefore possible and even advisable to search using report numbers without blanks or punctuation:

for	use:
IAEA-TECDOC941 in m	IAEATECDOC941 in rn
IAEA-SM359/1.4 in rn	IAEASM35914 in rn
DOE/OR/00033T22 in rn	DOEOR00033T22 in m
JAERI-Conf98-010 in rn	JAERIConf98010 in rn

As usual: upper/lower case is ignored by the search engine.

The other index files

So far we have described and used the free text index. It lists the terms used in the fields:

TI, OT, AU, CA, SO, ST, NT, RN, AB, DEM, DEI, DEC, DEP, BI, ID

The remaining database fields :

PY, LA, CI, PT, IS, CC, C1, UD, AN

are 'limit fields'. They can be accessed using the Change...button on the index screen. Descriptions of the limit fields are available via the **Description** button.



Limit fields can be used in

the same way as free text fields, but additionally you may be able to use numeric operators in some cases.



Did you get it?

Index files are an important element in the functionality of the database. You should be confident about their usage.

Using index files you can:

□determine the spelling of an authors name

 $\Box find \mbox{ out if a report with a given report number is present in the database$

□access limit fields as well as general fields

Indexes are particularly useful for:

□locating database records with misspelled terms □checking how often a term has been used for describing records

□accessing the database in chronological order

Now try it out!



Exercise

You will never get a good mastery of a complex piece of software unless you work with it.

Please start up the database, now!

Using the free text index, find out:

- 1. if INIS reports about authors who have the same surname as you
- 2. how often has your (your friends) name been misspelled
- 3. if you have a middle initial or name pre-fix: how often was it forgotten

Look for reports from your institute/university. How many types of reports can you distinguish because of details contained in the report numbers?

6 INIS Database on CD-ROM

6.3 Conducting searches

6.3.8 Using the INIS/ETDE Thesaurus



The Thesaurus

Like many databases, the INIS Bibliographic Database includes a thesaurus, a list of controlled vocabulary used to standardize the indexing in the database. The INIS/ETDE Thesaurus enables you to select and search for synonyms, related terms and preferred terms and also to see descriptions of the terms. Since it is arranged hierarchically, you can select more general (broader) and more specific (narrower) terms.

The INIS/ETDE Thesaurus is fully integrated into the WinSPIRS database interface. It is accessible via the Suggest button on the search screen or you can open the thesaurus screen by clicking the Thesaurus button or by selecting 'Thesaurus' from the 'Views' menu.



A suggestion

The INIS/ETDE Thesaurus -covering the entire nuclear field- contains tens of thousands of terms. How can one know them all?

One doesn't!

The good news is that help is available. By typing a term in the search window and pressing Suggest you can display the 'suggestion dialog

box'. It displays terms from the INIS/ETDE Thesaurus that are related to your search term.

You can now simply highlight the desired term and initiate a search by clicking either **Search** or **Explode**.

Description will provide a brief explanation of the term.

If you close the 'suggestions dialog box' without searching, you can reopen it from the search screen by selecting 'View Last Suggestions' from the 'Utilities' menu.

Why explode?

The INIS/ETDE Thesaurus is a controlled vocabulary with a hierarchical structure. Terms which are more general than your search term are considered broader while more specific terms are listed as narrower terms.

Example: The term 'DESALINATION REACTORS' will have the broader term 'POWER REACTORS' associated to it since it is a type of power reactor and 'BN-350 REACTOR' -a particular desalination reactor- is an example of a narrower term.

From the 'suggestions' dialog box:

<u>S</u>earch

- will launch a search for the exact term in the fields:
- TI Title
- AB Abstract
- **DE** Descriptors

<u>E</u>xplode

will launch a search only in the descriptors field but the search will include the search term itself as well as all it's narrower terms

Searching the Thesaurus

For more detailed descriptor searches you should use the thesaurus window. If you are presently using the search window or the index window you can open the thesaurus window with the Thesaurus button.



Permuted index

Entering a term into the thesaurus search window and pressing Look Up will display a

portion of the **permuted index**.

The permuted index is an alphabetical listing of all words present in any of the thesaurus terms. Underneath each index word is a list of all the thesaurus terms in which the index word occurs.



After highlighting a thesaurus term, you may now search immediately for the exact term or for the term including its narrower terms

(explode). Alternatively you may collect several terms using the <u>Add to List...</u> button.

Getting the full picture

With the **Term Information** button one can display the full thesaurus entry of a highlighted term.

The term's definition, its related terms and a few other bits and bobs will be on display.

Subject descriptors from the INIS/ETDE Thesaurus are used in a very specific context which might be different from the general context of daily life. It is

CAT SCANNI			
TERM INTROD	UCED: 19	978.	
USED FOR: (COMPUTE	R AXIAL TOMOGRAPHY SCANNING; NING; ECAT SCANNING	
RELATED TER	RM(S):	BIOMEDICAL RADIOGRAPHY	
SELECTED TE	RM:		
C	AT SCA	NNING	

therefore very advisable to check out a term's definition whenever there is any doubt about its exact meaning.

The term information panel is - again - fully integrated into the search interface. You may select any of the broader or narrower terms from the lower half of the panel to get detailed information on them or use them in a bibliographic search.

Could you follow?

A lot of effort goes into thesaurus maintenance. But why?

What do you think a 'thesaurus' might be?

□They became extinct when a large meteorite hit the earth. □He was a relative of Theseus who killed the Minotaur. □It is a set of subject descriptors with term relationships and scope notes

How does one use the INIS/ETDE Thesaurus?

Done must buy it in printed form

□It is best to phone the thesaurus specialist at INIS □It is fully integrated into the SPIRS database interface



Exercise

Are you ready to deal with the thesaurus?

Please start up the database, now!

Open the thesaurus window with the **Desaurus** button and try the following exercises:

- 1. Find out how many isotopes of Uranium are listed.
- 2. Check out when the term 'depleted uranium' was introduced.
- 3. Look up the definition of the term 'desalination'.

6.4 Storing and retrieving queries



Keeping your work

Building up a set of precise query expressions can involve a significant investment of effort.

- What happens if you have to interrupt your work before it's finished? Will you have to start all over again at another time?
- What if you want to keep up to date? You may have applied your query string to the existing database, but at some time in the future you will want to check if additional references in the latest database update will match your query.

These situations happen regularly and the good news is that the means to save your work are provided.

6 INIS Database on CD-ROM

6.4 Storing and retrieving queries

6.4.1 Storing and loading

			1. A.	
📲 WinSl	91RS 4.8	- INIS		1
<u>File</u> <u>E</u> dit	<u>U</u> tilities	<u>R</u> ecords	<u>M</u> ark	0
<u>Save S</u>	earch Histo	оту		hw
Load Ar	nd Run Se	arches		Ē
D <u>e</u> lete S	Saved Sea	irches		
<u>D</u> ownlo	ad Record	s	F11	
<u>P</u> rint Re	cords		F6	n
P <u>r</u> int Se	tup			
Select D)ata <u>b</u> ase		F8	
Res <u>t</u> art.			F7	
E <u>x</u> it				
INIS				
1 of 286	io search.	煮 1		

Keeping it safely

The dialog box for saving queries to local disks is accessible via the 'File' drop-down menu.

All you have to do is to select an existing directory on one of your disk drives and to specify a suitable file name.

If you want, you may type a short description into the description field. The descriptive text will be accessible when you work with the 'Load And Run Searches ...'

dialog box.

File <u>N</u> ame: search3.his	<u>D</u> irectories: c:\query	
SEARCH1.HIS SEARCH2.HIS	C:\	Cancel
List Files of <u>Type</u> :	Dri <u>v</u> es:	
History Files(*.his)	• C:	-

Legal trouble

Depending on how the software was set up. you might get an error



To remedy this situation you should close WinSPIRS down and start the 'RECONFIG' configuration tool.



Configuration options

After starting the 'Reconfig' configuration tool for WinSPIRS, you are presented with the configuration options selection panel.

It is probably a good idea to go thru all the options available at some time in order to fine-tune the behaviour of WinSPIRS to your particular needs.

For our present task we select the File Options... menu.

Vir	nSPIRS 🛛 🛛 🗵			
Ą	Configuration Options			
	<u>R</u> ecord Display Options			
	Search Options			
	Print Options			
	<u>File Options</u>			
	Workstation Options			
	Library Holding Options			
	ERL Options			
	SD <u>I</u> /Alerts Options			
	Revert to <u>D</u> efault Settings			
	Save Cancel <u>H</u> elp			

Adding a drive letter

By default, WinSPIRS allows the saving and loading of files only from the PC's floppy disk drives (drive letters: A,B). In order to be able to save data on any hard disk you may have, you must add the corresponding drive letters, separated by commas.

ile Options			×
Records Options X Allow Download X Download Search X Include Holding X Download Record	ling of Records ch History s <u>M</u> essage rd Number:	Download Fields	Field Labels
Allowable Drives	A,B	Default File Name	download.txt
Traphics Uptions		Allowable Drives Default File Name	A,B graphic.tif
Search History Opti	ons		
X Allow Saving	Allo Loading	Default File Name	search.bis
Drives for Saving	A.B.L	Drives for Loading	
	JK Cancel	Detault Settings	<u>H</u> elp

In our example we have added the drive letter 'C:'. To close the file options dialog, click 'OK' and close the configurations options panel by using the 'SAVE' button.

and the second se	
🔩 WinSPIRS 4.0 - INIS	Loadi
<u>File E</u> dit <u>U</u> tilities <u>R</u> ecord	ds <u>M</u> ar.
Save Search History	Once y
Load And Run Searches	on a di
Delete Saved Searches	them,
Select Database	F8
Restart	F7 Retriev
E <u>x</u> it	automa

Loading and deleting stored queries

Once you have some search histories stored on a disk drive, you may retrieve or delete them, using the options from the 'File' menu.

Retrieving a stored search history will automatically execute the searches on the presently loaded parts of the database.

Example:

		The searches below are from: C:\QUERY\SEARCH.HIS.		
#1	77	DESALINATION in TI,AB,DE		
#2	27	"desalination-reactors" in DE		
#3	498	"liquid-metal-cooled-reactors" in DE		
#4	3820	explode "thermal-reactors"		
		The searches above are from: C:\QUERY\SEARCH.HIS.		
-				

6.4 Storing and retrieving queries

6.4.2 SDI services

Be choosy

'Selective Dissemination of Information' (SDI) is a procedure by which a continuously updated database is regularly interrogated by a predetermined query string.

The aim of SDI is to alert you to new developments in a given subject field and to foster current awareness.



Loading and running a stored query on the quarterly updates of the INIS Bibliographic Database facilitates current awareness programs. However, if SDI is an important aspect of your work, then you should consider using the Internet based version of INIS, which offers weekly updates.

6 INIS Database on CD-ROM

6.5 Using and processing search results



Once you are done with searching...

Once you have fine tuned your query and conducted a successful query, what will you do with the results?

You could of course write down some of the references which will be displayed in the 'retrieved records area' by hand, but there are better ways of using the results.

6.5 Using and processing search results

6.5.1 Exporting and printing results



Printing the results

An obvious way of processing your search results is to

print them.

However, it is generally worth going through the results on the screen and making sure that what you got is what you want (WYGIWYW). If WYGIWYW is not the case, then you can at this stage still select manually the most relevant records by ticking the little book symbol on the left of every reference. You will later be able to limit printing or exporting of results to the marked records only.

 Itilis

 1 of 3820 in sean

 Itil Experination

 AU: Hraban

 Itil Validat

 function

 with tot

 AU: Heca, -R.

 Itil Optimiz:

 calcule

 AU: Flibor

 Itil Ano'

The **Print** button will now open a dialog box for setting print parameters and for printing.

Exporting results

The **Download** button (or the equivalent item from the pull down menu) allows you to export search results to a text file.

The handling of the export function is very similar to what you have learned about printing. In the simplest case the text file will simply be used for later printing or for archival.

However, since the exported text is essentially a tagged list, you will be able to import the records into many database applications or spread sheets.

C As Shown O Default <u>Marked Records</u>
 User-Selected All Displayed Records Current Record [#1] Records: O Short Field Names Long Field Names Other Options O No Field Names

The download dialog and the

Options... panel give you some influence on the formatting of the exported text. Use it to optimize the usefulness of your search results.