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## GLOSSARY

## Archives

Information saved from search sessions.

## **ASCII Text Files**

Plain text without formatting.

#### Clipboard

A temporary storage area for cut or copied text You can paste the Clipboard contents into a Windows application.

#### **Comprehensive Search Strategy**

This option considers all possible ways concepts can be related.

## **Default Settings**

These are settings READWARE<sup>®</sup> has already fixed. The search default settings stay in effect until you change them.

#### **Exact Match, Literally**

A Search Strategy that looks only for the words in the Question.

## **Focused Search Strategy**

This option looks only for words and concepts closely related to the Question.

## **Natural Language**

This is the way people really speak.

#### Normal Search Strategy

A basic all-purpose option good for analyzing many kinds of files.

## Quality of Q & A Match

This Search Option lets the user decide how closely the question and response should relate to each other.

## Question

... is just a question. Go to the Question window and ask what you want. Plain language works just fine.

## **Reading List**

A file or batch of files to search.

## **Reading List Title**

This is your name for one or more files you want to search. There is room to add the date or any other notes . You can have up to 4,000 different reading lists.

## Response

An answer to a Question. The response is highlighted and appears along with neighboring text.

## **Role of Names & Numbers**

A Search Option that gives more weight to finding names and numbers.

## **Search Options**

These settings alter the search pattern to fit your text.

## Search Strategy

You can carry out your search in many ways. You can concentrate only on certain spots. You can cast your net far and wide. Or something in between. READWARE® offers five strategies.

## **Search Summary**

While the search is under way, this report appears on the screen. It lists only the names of the files responding to your question and how many responses in each.

## **Size of Text Probe**

This Search Option tells the program how many words to include in each chunk.

## Wide Search Strategy

This pattern brings back a broad array of responses.

## **The Keyboard**

The  ${\tt READWARE}\, \ensuremath{\mathbb{R}}$  TexScout  $\ensuremath{\mathbb{C}}$  can be operated entirely from the keyboard.

ТАВ	jump to next box or button	
Shift + TAB	jump to previous box or button	
Arrow keys	move between elements in a dialog box	
Alt + underlined letter	select box or button	
Alt + Down Arrow	dropdown combo box	
Enter	select highlighted element or button or enter typed text or just move on	
Escape	cancel or exit	
Control + Escape	switch to other windows	

## **The Mouse**

The mouse works in the usual way.

Click to select.

**Double Click** to make a directory current.

**Drag to highlight.** Hold the left mouse button down over the text and move the mouse.

## **The Reading List**

The READWARE® TexScout©

EASY AS 1 - 2 - 3

- **1** Select files
- 2 Ask a question
- **3** Get a response

To organize your Reading List go to the main menu and open "Files: Select Reading List."

The READWARE® TexScout© will analyze any <u>ASCII files</u> you add to a Reading List.

All types of files, including word processor files, can be analyzed, but a few formatting characters may appear in the text.

In future versions, The READWARE® TexScout© will correctly display any format.

You can have as many as 4,000 reading lists with 4,000 files in each list.

*Note:* Shorter lists mean faster searches.

## **Quick Steps**

- **1** Type in title of Reading List
- 2 Select a directory
- **3** Select files from the directory

Give your reading list a title. Type the title into the box called Title of Reading List, **then hit the Enter key**.

Now you have an empty reading list. READWARE® will not read a bare list, however. You need one or more files there.

Go to the boxes on the right side of the screen READWARE® automatically displays the names of all drives, directories, and files in the current directory.

Select the drive where your files reside. The drive you are in now is displayed by default.

Next, choose the directory with the files you want to search. Double click or hit Enter.

If you pick a file name extension such as **\*.doc** from the dropdown list of file types, only files with this extension will be displayed. If you type in a new extension and hit enter, it will be added to the list.

Go to the Current Directory file list. Add the files you want to analyze to the Reading List by clicking on them with a <u>mouse</u> or using the <u>keyboard</u> arrow keys, followed by the space key. Then, push the "Add" button.

Now you have organized your reading list. READWARE® will search the list that appears in the title box.

Hit the "OK" button. This takes you to the <u>Question</u> window. After you have prepared your question, READWARE® will begin the search.

Reading	[] Remove	Delete title and Reading List
List	[] Add	Add highlighted files to the
Buttons		Reading List
	[] Add All	Add all files in Current
		Directory to Reading List
	[] Delete	Remove highlighted filenames
	[] Delete All	Clear Reading List

## **The Question**

## **Quick Steps**

- **1.** Open the Question box
- 2. Type in a question using the keyboard
- 3. Hit OK to begin the search or
- 4. Hit the Options button to review or reset the Search Options.

READWARE® will accept a question up to 400 characters long. But don't overdo it. For most texts, short queries give better results.

Because the READWARE® technology uses an internal shorthand to look for responses, many users find that queries made up of two words are ideal.

Practice asking questions. Try asking the same thing several different ways.

Complex wording should be made simpler. For example:

- 1. What is it about the troposphere that makes it appear an azure hue to those humanoids who inhabit the terrestrial plane?
- 2. Why does the atmosphere seem blue when we look at it?
- 3. Why is the sky blue?
- 4. Sky blue

**Note:** READWARE® questions do not need punctuation.

Question	[] OK	To begin the search
Buttons	[] Cancel	To stop the question session
		and return to the main menu
	[] Options	Opens <u>Search Options</u>

window to review or adjust the search patterns

READWARE® doesn't need keywords, codes or indexes to find something. All you have to do is ask it.

Try Exact Match, Literally, for:

names, places, dates, numbers, technical terms, abbreviations, acronyms other specialized information

Use the four other settings:

Normal Focused Wide Comprehensive to look for facts and concepts, to pursue hunches, to dig out obscure references, to follow the trail of tidbits, to make discoveries, and to actually "brainstorm" for knowledge.

Adjust the <u>Search Options</u> to get the best match between question and response.

- **Note:** READWARE® will not search an empty reading list. The program will send you to the <u>Reading List</u> dialog box for some files.
- **Hint:** READWARE® may not find the right response if you have a misspelling in the question.

## **Search Options**

 $\ensuremath{\mathsf{READWARE}}\xspace^{\ensuremath{\mathbb{R}}}$  has pre-set a search pattern that gets good results for normal text.

You can change the pattern in the Search Options box. To go there, hit the Options button in the <u>Question</u> window.

The Search Options window lets you adjust four patterns:

- . <u>Search Strategy</u>
- . Quality of Q & A Match
- . Size of Text Probe
- . Role of Names & Numbers

## **Search Strategy**

## **Quick Steps**

- **1.** Open the Search Options dialog box
- 2. Open the Search Strategy dropdown box
- 3. Select a strategy

A search strategy is a way we analyze text. READWARE® TexScout© search strategies are designed for all kinds of text.

READWARE® has five Search Strategies:

•	Normal Search	A good all-purpose strategy.
•	Focused Search	For precise results and closely related ideas.
•	Wide Search	Many responses. May include subtle associations and new ways of looking at things.
•	Exact Match, Literally	Excellent for names, dates, places, technical terms, abbreviations, and so on.
		E

. Comprehensive Exploratory search.

The <u>default setting</u> is Normal Search.

## **Quality of Q & A Match**

## **Quick Steps**

- **1.** Open the Search Options box
- 2. Open the Quality of Q & A Match dropdown box.
- 3. Select one of the 7

This is the second <u>Search Option</u> READWARE® has seven Quality of Q & A Match settings to adjust how closely the question is related to the response.

Settings range from the most precise, **Matching Concept**, to the most general, **Any Relation**.

Use the dropdown list to select a Match option:

- . Matching Concept
- . Very Close Match
- . Close Match
- . Relevant Relation
- . Fairly Related
- . Some Relation
- . Any Relation

The <u>default setting</u> is **Fairly Related**.

A good rule of thumb is: the closer the match, the fewer the responses.

**Note:** The READWARE® TexScout© works by combing the <u>Reading List</u> for all possible places where the concepts in the <u>Question</u> relate in some way to the selected text.

Sometimes, you may wonder why some responses were chosen. But if you look closer, you can make a useful connection.

To learn more about this unique technology,

## see <u>"What Makes READWARE® Different?"</u>

## **Size of Text Probe**

## **Quick Steps**

- 1. Go to the Search Options dialog box
- 2. Open the Size of Text Probe box
- 3. Select one of 7 sizes

This is the fourth Search Option. It tells The READWARE® TexScout© how big a chunk of text to analyze at any one time.

The chunk size is calculated by multiplying the number of words in the option by the number of words in your question.

There are seven Size of Text Probe options:

- . Half the Size of Question.
- . Same Size as Question
- . Twice the Size of Question
- . Triple the Size of Question
- . 4 Times the Size of Question
- . 5 Times the Size of Question
- . 10 Times the Size of Question
- **Hint:** If you are aiming for precise results, try a small probe setting. Higher probe sizes work better for questions that have a lot of words.

The <u>default setting</u> is Triple the Size of Question.

## **Role of Names & Numbers**

## **Quick Steps**

- **1.** Enter the Search Options dialog box
- 2. Open the dropbox called Role of Names & Numbers
- 3. Select one of 3 values

This is the third Search Option field. The Role of Names & Numbers settings can be boosted to make it more likely to find certain names, places, technical terms, obscure words, abbreviations, dates, times and other numbers.

## Choose one:

- . Same as Other Words
- . More Weight Than Other Words
- . Search Will Always Find Them

The <u>default setting</u> is "Same as Other Words."

## **Default Settings**

These <u>Search Options</u> settings have been pre-set by READWARE® to handle normal text. You can change them as needed.

<u>Search Strategy</u> Normal <u>Quality of Q & A Match</u> Fairly Related <u>Size of Text Probe</u> Triple the Size of Question <u>Role of Names & Numbers</u> Same as Other Words

## **Search Summary**

As The READWARE® TexScout© searches your text, a Search Summary window shows which files have been explored and how many responses are in each.

To quit the search in progress, hit the **Cancel** button.

When the search is done, you can select one file from the list to **preview** or **delete**.

To preview the responses from a file, select it, then press enter.

To delete all responses from a file, select it, then click **Delete**.

## **The Response--An Intelligent Reply**

A response is an answer to a question.

A response is information retrieved.

A response is a new idea or insight.

And much more.

This section will review what goes on in the Response window.

To learn more about the theory that makes a response possible, read "What Makes READWARE® Different?"

Responses are numbered and displayed in order from most related to least related to the question.

Read the caption line at the top of the Response dialog box to get:

- . Number of this response
- . Total number of responses
- . File in which the response was found

. **Quality of the match**; in other words, how well the response fits the question.

If the message "**only partly related**" appears on the caption line, it means one or more words in the question are not related to that spot of text.

*Hint:* Sometimes it helps to reword the question.

READWARE® may return up to 4,000 responses for each question.

Responses are highlighted. Adjoining text also is

displayed.

To read the responses, hit the Enter key use the buttons or select from the View menu.

**Response**[] NextTo see response that follows**Buttons**[] PreviousTo see the response before<br/>this one[] MarkSelect for the Archives

- View First Response Menu Last Response Response Number ... Search Summary
- SaveCopy to ClipboardMenuSave to Archives

PrintPrint Highlighted TextMenuPrint ResponsesPrinter Setup

Every reponse can be saved in the <u>Archives</u>. Use the **Mark check box** at the bottom of the screen to select. If no responses are marked, all will be saved. Read more about this option in <u>"The Archives."</u>

## To Save a Response

## Where?

- 1. In the <u>Clipboard</u>
- 2. In the Archives

If you choose to save to the Archives, select the responses in the Response window with the **Mark check box**, then select **Save to Archives** from the Save menu. An edit box will appear to type in the description of this archive entry. Type it in and you are done.

If you do not select any responses with the Mark check box, all responses will be saved.

To **review** the **<u>Archives</u>**, select Archives from the Review menu in the main window.

## **The Clipboard**

You can save highlights from the responses in your Windows <u>Clipboard</u>.

Drag the <u>mouse</u>, or use the **Shift + Down-Arrow** or Right-Arrow key, to highlight words or lines of text.

From the Save menu in the Response screen select "**Copy to Clipboard**."

The saved responses can be pasted from the Clipboard to other Windows applications.

## The Archives--A Storeroom for Responses

## **Quick Steps**

- 1. Open the Archives window
- 2. Select a session to look at
- 3. Review or delete session responses

Go to the main menu and select **Review: Archives**.

To review the saved responses, select the session from the dropdown box.

The <u>Title of Reading List</u> will appear in the second box.

The question is displayed in the last box.

Responses can be reviewed or deleted.

## Warning:

If you change a Reading List after saving an Archives entry, this entry is corrupted. The READWARE® TexScout© will place an X in a check box with a warning.

This Archives entry cannot be reviewed any more and it should be deleted. However, the new Reading List and the old question are still active for a new search.

Archives	[]	Delete session
Buttons	[]	Review responses

## What Makes READWARE® Different?

## About Readware®

READWARE® is a new technology that is based on language research probing the archetypes of meaning in many different languages.

When the findings are taken into the computer lab, the dynamic new software that results is tidy and efficient.

READWARE® redefines the meaning of "interactive." It's as if READWARE® really reads! Even better, READWARE® really understands! Someone once said READWARE® is so good it's "spooky."

## The READWARE® Concept

READWARE® is the only software that begins to recognize the meaning of words, enabling the user to retrieve information from a file without first knowing what's in there.

And it accepts plain talk. Not obtuse technical jargon that takes the fun out of using computers, but natural language the way real people speak and write.

The patented calculation techniques measure how closely words and phrases are related to each other.

This gives the user two remarkable features.

. A reliable searching tool

# . A smart research partner to sit down and "brainstorm" with

How well does READWARE® understand language?

The first application of READWARE®, "The Research Assistant," scored higher than average on an SAT (Scholastic Aptitude Test) college admissions test.

READWARE® now ushers in a second generation of information retrieval systems. Simpler and more powerful.

It is a portable (ANSI C) fast search program with new proprietary algorithms featuring:

- A concept base that organizes the words of the English language into useful structures including synonym classes (thesaurus), function classes (grammar) and more relations not available in any other product.
- Different search strategies ranging from "exact match" to "comprehensive" which incorporate normal keyword search and four additional proprietary search algorithms using archetypes of meaning (semantic matrix) and the concept base.
- Text search in ANY file format (plain ASCII, word processor, typeset, UNIX files, data base memos, CD ROMs and even binary and system files) and you can read and print the responses, too.

READWARE® has been ported to large information systems at the Library of Congress, the Canadian National Archives and Clemson University (Beef Industry Information System).

"READWARE® is setting an industry standard for multi-media information systems." --Clemson University

"At the National Archives of Canada, we needed retrieval software that would be easy to use. After analyzing the text retrieval software packages on the market,

# we chose READWARE® and the system has delivered beyond our expectations."

--Doug Taylor Morro

Now this trend-setting technology is available for the PC under the name **TexScout**<sup>©</sup>.

#### "I used it to scan a number of sizable plain text files on my system and found its performance to be good and the program easy to use."

--Lin Varnum, PC Support

Why be satisfied with finding keywords when you can have so much more, including real matching concepts?

For example, enter the word "judge" and TexScout© will find related references to "court" and "law" and even "wisdom."

TexScout<sup>©</sup> is so easy to use, children can learn to use it right away to get more out of their home and school computer libraries.

Yet it is powerful enough to satisfy the needs of business and academic users, too.

A toolkit (in ANSI Standard C) is available to port READWARE® to any computer platform. The code is small and simple to integrate.

Domain specific concept bases (medical terms, legal terms, etc.) will soon be available.

Here are some of the ways you can use The READWARE® TexScout©:

- . Legal text search (lawyers, courts and police)
- . Medical search (physicians and hospitals)
- . Customer service and records
- . Municipal and state records
- . Scanning environmental impact reports and other public interest records
- . Easy access to CD encyclopedias and the reams

of government documents

- . Researching college papers and theses
- . Writing fiction and non-fiction
- . School and community libraries
- . Analyzing files from computer networks
- . Reading computer programs and system files
- . Genealogical research

. ...

## The Theory behind READWARE®

"Language is a theory of reality," according to Dr. Tom Adi, chief scientist at Management Information Technologies, Inc. and a developer of READWARE®.

Words are not just arbitrary sounds. They mean something, Dr. Adi says.

Here are some of his ideas, presented in a 1991 paper to the American Society for Information Science meeting in Washington, D.C.:

Consider the following words: sea, see, say, sew, sow, saw and sue.

Assume that the sound "s" stands for an abstract concept, something like a stream, or a closed course.

A sea is a closed course of water. Seeing is following a closed course of light. Saying is closed dis-course. Sewing is a thread and a needle on a closed course through some fabric.

We sow a closed course for new life. Sawing is using a closed course of cutters to cut an object. And (pur)suing is basically a closed course of consequences.

How about the words day, do, die, dye, due? There is a concept for the "d", too, but it is more difficult to understand. "D" stands for interface essence. Essence is either local (occurrence) or global (domain).

A day is an interface domain (of time). To do is to interface to an occurrence. A die is an instrument with cutting edges (domain interfaces), or a cube (also domain interfaces, with plural "dice").

To die is to cross the occurrence interface. Dye is domain interface. Things are due at the interface of occurrence.

The following principles emerged from this line of thinking:

## 1. Language is natural and alphabetic.

People do not invent meaningful words, they either learn them from others, or discover new words in their minds, or combine (parts of) old words into new words.

Spelling is a natural recognitive process and so is the transition from spoken language (sounds) to written language (letters). Non-alphabetic languages have an implicit spelling of some form. All languages stem from one language.

#### Words are theories about things. At any given time, the sounds of a meaningful word stand alone and together for some aspects of real things. A word is thus an abstract view of reality: a theory about things.

Each sound of every natural alphabet represents an abstract concept. The relationships between the sounds in a word reflect a concept structure: a word theory.

The word context, i.e. the words around a word, as well as the realworld context, i.e. the situation in which a word is used, jointly determine how a word theory is applied, i.e. linked to real-world processes and objects which reflect that theory. This is how people use language to learn about and understand the world.

# 3. Archetypes of meaning form a complete and consistent symmetrical structure.

The sounds, letters and symbols of human languages are each linked to one or more locations in a table of universal archetypes of meaning: the semantic matrix.

A matrix row is a complete set of four orientations (bi-polar symmetry), and a matrix column is a complete set of eight abstract categories (all combinations of three basic categories).

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## Archives

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Wide Search Strategy This pattern brings back a broad array of responses.

# **How to Order**

You are using a demo version of The READWARE® TexScout© which has been reduced to searching single-file reading lists.

With the full version of The READWARE® TexScout© you can search up to 4,000 reading lists, with up to 4,000 files in every list.

We invite you to order the full version at a special introductory price of **\$150**.

Send check or money order to:

MITi (Management Information Technologies, Inc.) 5 Vanderbilt Motor Pkwy Suite 403 Commack, New York 11725 *Tel: (516) 265-3518* 

When you register the full version, you will qualify for free updates during 1993 and future updates at a special savings.

This is the first PC product of the READWARE® second generation technology. READWARE® has been in use in large information systems such as the Library of Congress since 1987.

See <u>What Makes READWARE® Different</u> for more about the technology.